VOL 82 NO. 4

textile bulletin

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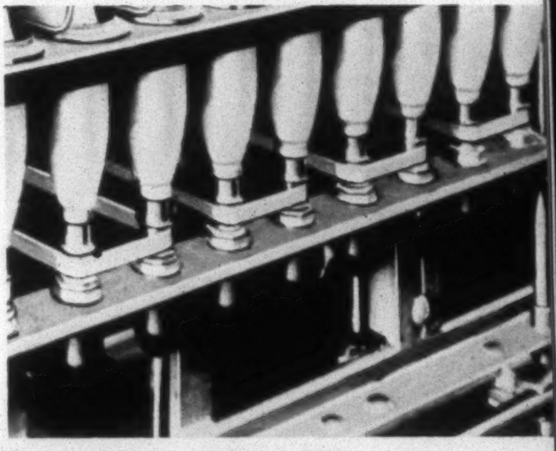

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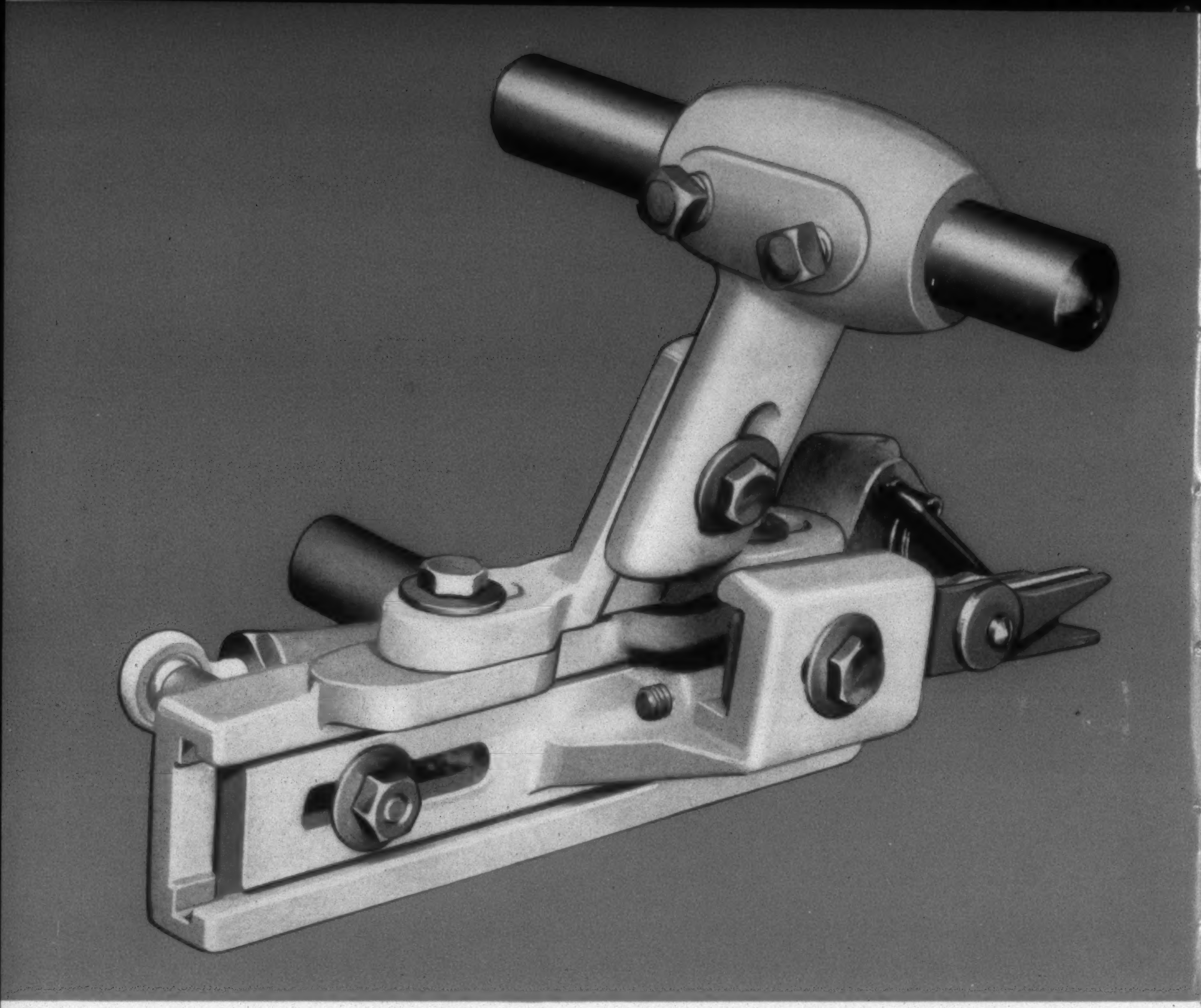
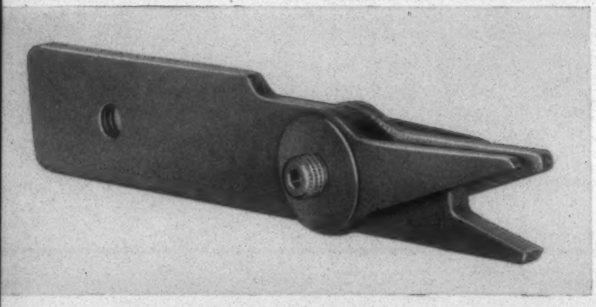


23,817 NOW IN USE

IN MILLS THROUGHOUT THE WORLD



Improved Filing Knife Assembly cuts and holds better on yarns ranging from 15 denier monofilament nylon to 4's cotton flannel napping.

. . . a sales record which proves the acceptance of the new #25 Draper Thread Cutter.*

Reasons for this widespread acceptance are:

1. Maintenance costs are reduced with 20 fewer parts used in assembly.
2. It is easily applied without changing existing parts on the loom.
3. Settings are easier to make — easier to maintain.
4. Drag-ins are greatly reduced.

23,817 mill applications also proves the #25 Draper thread cutter, with its full range of adjustments, increases production and lowers cost.

*Patents Pending

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For more than 50 years SONOCO precision paper products have meant

Plus Value

because . . .

SONOCO is constantly striving to improve present products and conducts a continuing program of research and development to meet the needs of an ever-changing textile industry.

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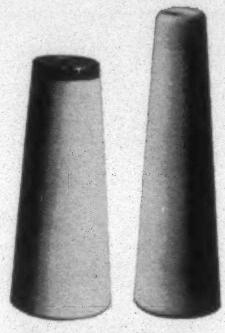
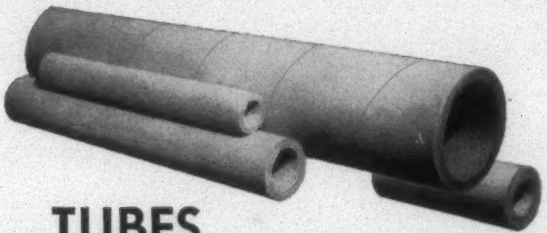


CONES

Available with various surfaces, inside and outside printing, notches, scores, perforations and in many nose and tip designs. Lacquer tipping, dyed base and tip, and striped base can be furnished for yarn identification.



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Spiral, convolute, parallel or drawn construction from ⅛" to 36" I.D., in any practical length and wall thickness—for every textile need! Available in colors, various surfaces, treated, impregnated, perforated, scored, notched, printed, with crimped or burnished ends.

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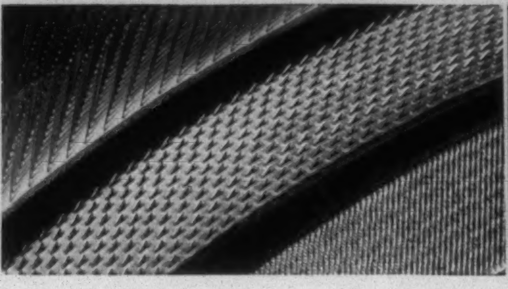

Ashworth Tips ON CARDING

No. 28 in a Series

CONTROL OF AIR CURRENTS

Much has been written and said about air currents on the revolving flat card. We, as a card service organization, know that these air currents are generated by the speed of the lickerin and cylinder. We also know that the screens under the lickerin and under the cylinder, and the plates around the cylinder, are put there to control these air currents.

We have learned that the screens must fit properly and be of the correct contour to permit setting exactly to gauge at all setting points. This same thing is true of the various plates at the front and back of the card. The make-up pieces on the lickerin bonnet and on the doffer bonnet should also be made to fit your particular model of card.

Unless these screens and plates function as they should, you cannot expect to control the amount of waste and fly or the quality of work produced by your cards. To enable you to do this to the best of your ability, we offer the following suggestions:

1. Institute a regular inspection schedule on screens, plates, and make-up pieces.
2. Obtain these parts from only reputable manufacturers who know their business.
3. Have your maintenance men work very closely with your card grinders in the inspection of present screens and plates, and check on the ability of these parts to be properly set to gauge at all setting points.
4. Be particularly critical of new screens and plates.
5. Set up a once-a-year cleaning schedule on cylinder screens, this to be in addition to any inspections made. The lickerin screen is usually cleaned when the back of the card is re-set.
6. By following regular inspection and cleaning schedules and being certain that screens and plates are made for your particular make and model of card, you will have control over the air currents. The end result will be control of waste at the card, longer life of card clothing, and better quality of card sliver.

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American Card Clothing Co. (Woolen Division)

Fall River*†‡ Worcester‡ Philadelphia*†‡ Atlanta†‡
Greenville*†‡ Charlotte†‡ Dallas†‡ (Textile Supply Co.)
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3 Factories • 6 Repair Shops • 7 Distributing Points

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3 FACTORIES • • • 6 REPAIR SHOPS • • • 7 DISTRIBUTING POINTS

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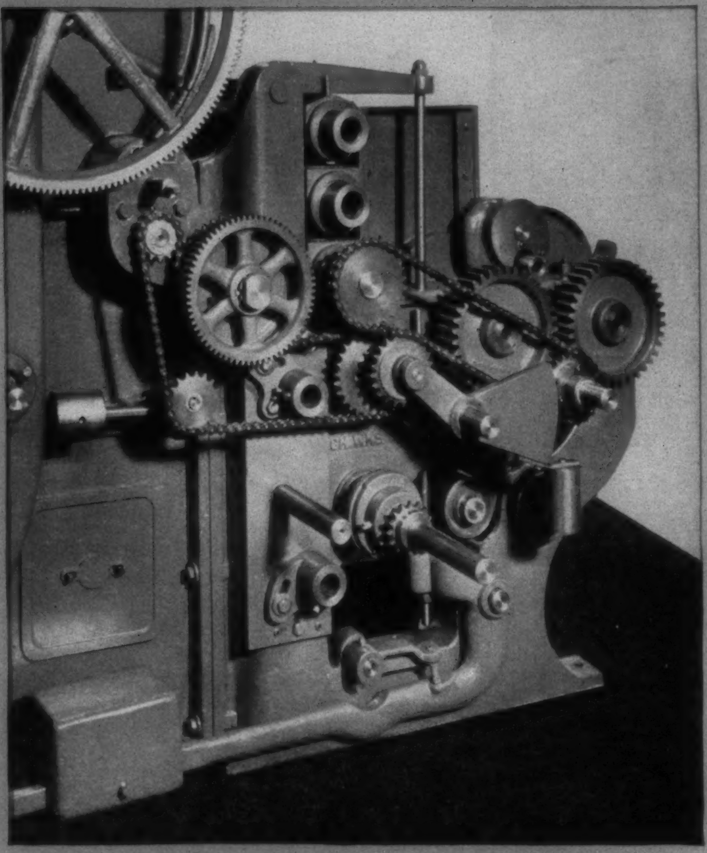
. . . then, think of what you get in

ALDRICH PICKERS!



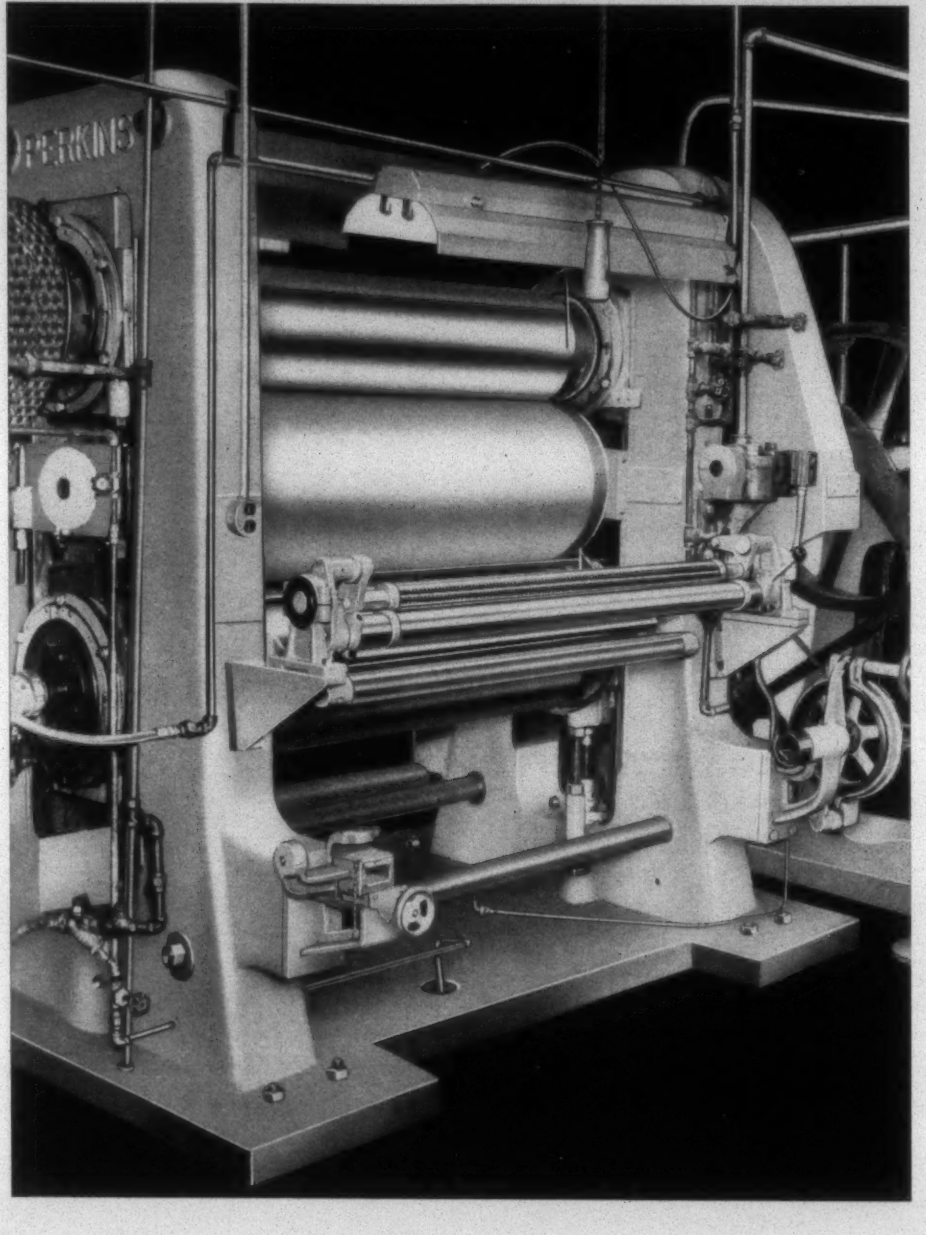
- The chain drive to the draw-rolls and screens permits better draft control between the screens and the draw-rolls and the draw-rolls and the calender rolls. The old gearing was rather inflexible. The new chain drive is very flexible, and can give much smaller increments of change than were possible with the old drive.

The chain drive to the fluted calender rolls is also highly flexible and permits very accurate maintenance of the desired draft between the vertical rolls and the fluted rolls so that any slack can be kept out of the lap, and firmer more compact laps wound on the lap pin.

This chain drive to the fluted rolls stops those rolls while the picker is being doffed. This prevents injury to the lap by unnecessarily turning it while no cotton is being added. The lap is broken on top of the back fluted calender roll, and remains threaded up under the press roll. This eliminates the heavy place in the lap usually found next to the pin, and it also speeds up the doffing time, because the lap is only two inches from the pin when the picker is started.

AldricH MachinE WorkS
Greenwood, South Carolina

ANOTHER OUTSTANDING PERKINS TEXTILE CALENDER



Perkins Three-Roll Hydraulic Calender—100 tons gross operating pressure—two chilled iron rolls—one wool felt paper roll—anti-friction bearings throughout—friction brake let-off—three adjustable tension bars—and the famous Perkins mechanism for automatic detection of seams and slubs. A modern, high production calender.

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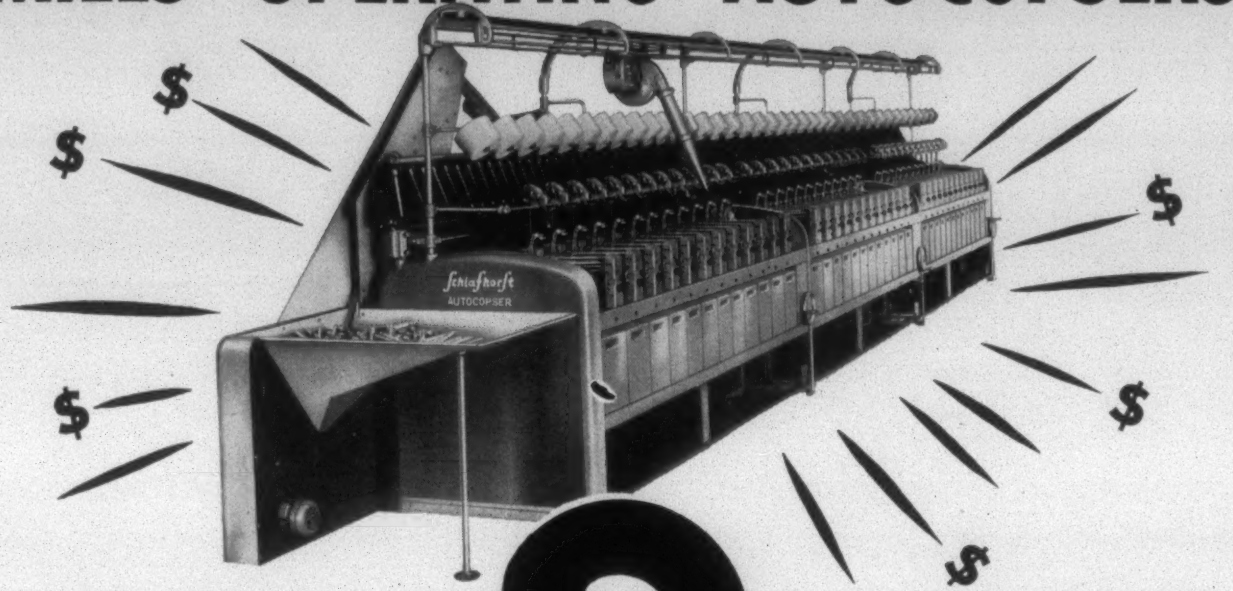
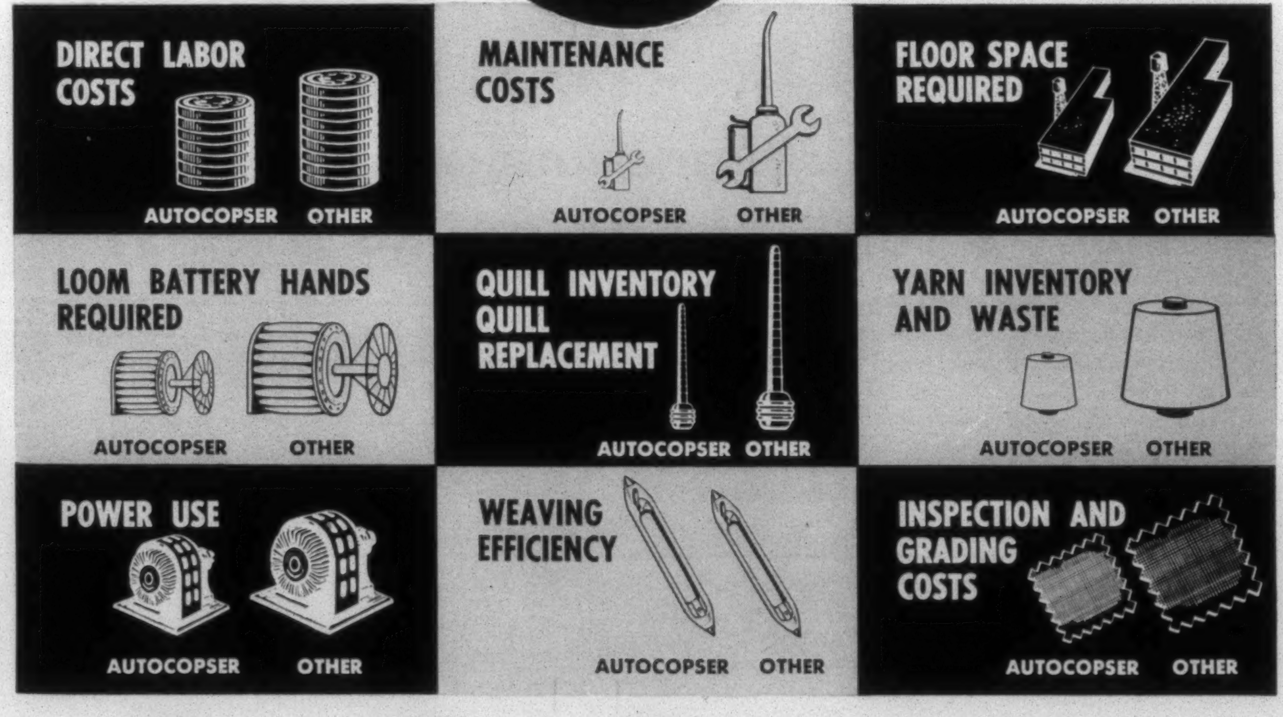


SAVE 9 WAYS



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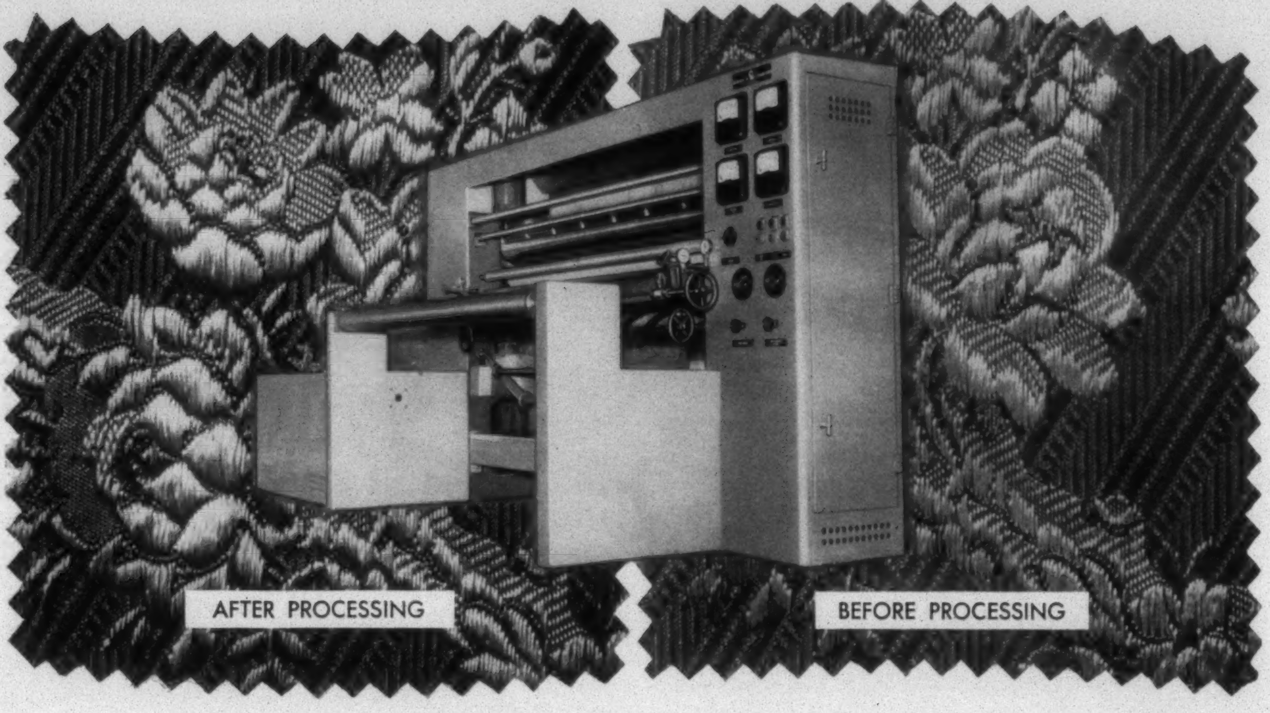

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Now you can command an extraordinary range of special effects — through new compacting methods which enhance the basic structure of goods in unprecedented fashion and *at the same time* shrinkproofs to commercial standards or better.

The R & L compacting machine, particularly designed to practice the new methods, excitingly transforms woven and non-woven fabrics and yarns of many types by mechanical methods — no chemicals! Nubby fabrics look nubbier, patterned weaves are accentuated with depth dimension added . . . and, after these mere beginnings, possibilities for further developments are practically unlimited. Yarns come up much loftier, for use in new and superior yarn-dyed fabrics.

This compacting machine handles a wide range of weights and types from very light to heavy fabrics such as carpeting, and a variety of yarn counts consisting of any fiber or blend. Reasonable in cost, and needing minimum floor space, it can be synchronized for in-line production at relatively high speeds. Replaces sponging process before tailoring on wool, worsted, blended fabrics — also achieves fine felting effects on worsteds and synthetic fabrics.

Riggs & Lombard collaborated in development of this machine for practicing the new compacting methods on woven and non-woven fabrics and yarns of many types. Now we are sole manufacturers and distributors of this machine in these fields, under licenses from the originators, Fabric Research Laboratories, Inc. Write for complete data. Find out how we helped engineer this new machine — and can engineer an installation that will assure *you* of immediately profitable new fabric effects.

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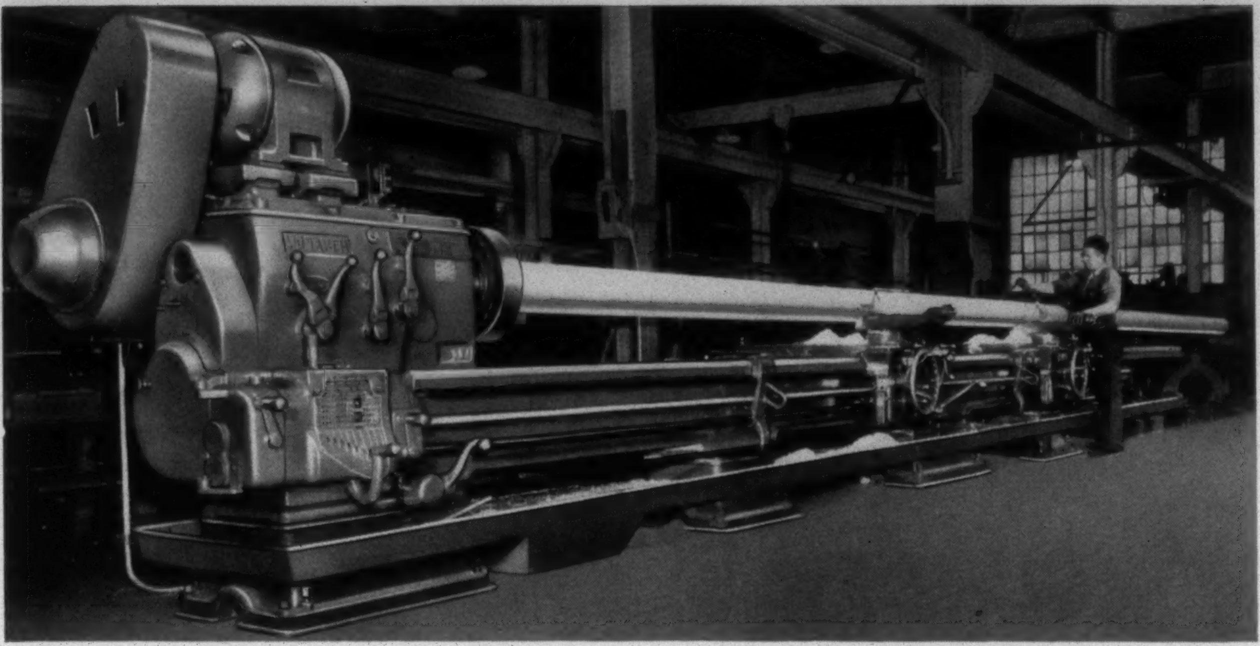

Monarch engine lathe turning take-up roll 650″ long.

It takes Machines like this . . .

(plus C&K "know-how")

. . . to make Looms like this

C&K Felt Loom, Type F-2 650″ between swords, 13 harness (8/10″ space) 3 x 3 box. Shown in service at Albany Felt Co., Albany, N. Y.

This giant C & K Loom . . . *55 feet between swords* . . . produces papermakers' wool felts that are used in manufacturing the paper on which this message is printed.

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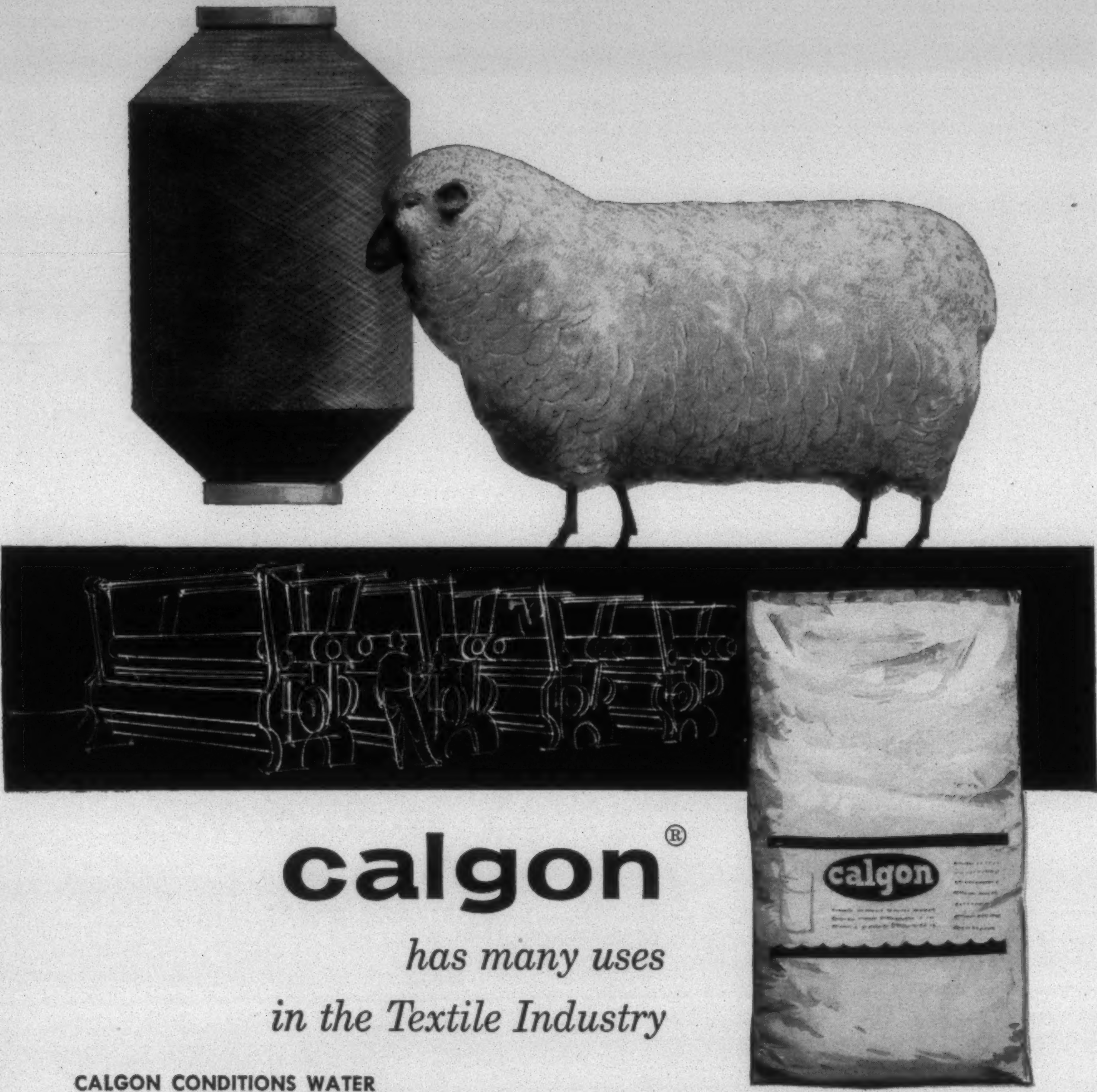
This "Invisible Trademark" Stands Back of the Trademarks of the World's Finest Fabrics . . . which are WOVEN Fabrics.



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for smoother, more even finishes

Calgon is an excellent dispersing agent for clay, calcium carbonate, titanium dioxide and other pigments.

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Calgon aids penetration

Calgon assists the penetration of dyes in pigmented rayon, giving deeper and brighter shades. Calgon stops scum formation, assuring more even colors.

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Eliminates iron, reduces off shades and lowers chemical cost of bleaching

Calgon prevents the contamination of process water from iron corrosion products. Calgon Threshold Treatment is the most economical method for eliminating iron contamination.

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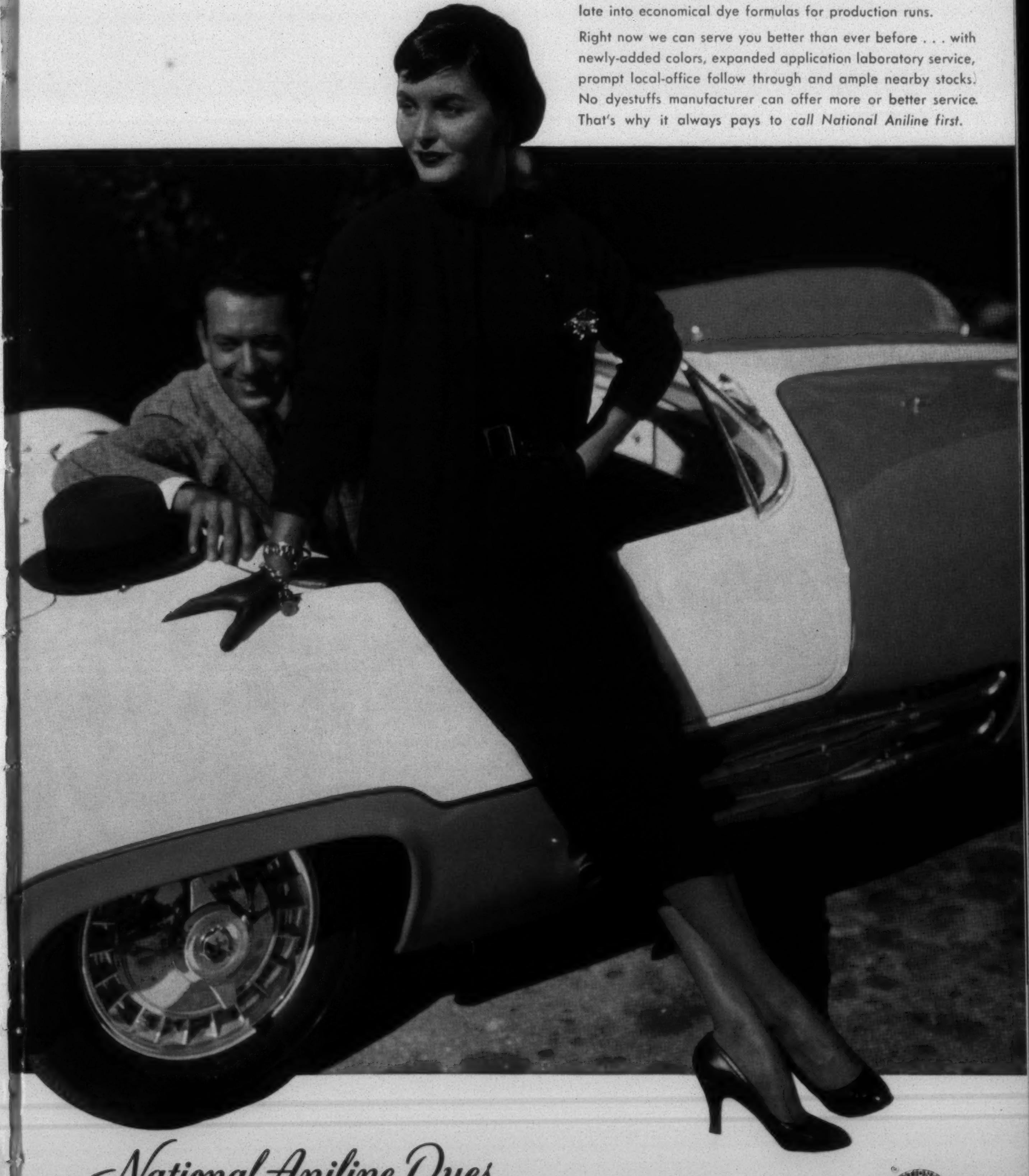
For super-powered sales appeal in your new lines, let National help you add the plus value of dynamic color styling to your fabrics. Any color effects your stylists conceive, we can translate into economical dye formulas for production runs.

Right now we can serve you better than ever before . . . with newly-added colors, expanded application laboratory service, prompt local-office follow through and ample nearby stocks. No dyestuffs manufacturer can offer more or better service. That's why it always pays to *call National Aniline first.*



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FOR FINISHING RAYONS AND COTTONS

a smooth hand with brilliant color

CLEARFILM is a unique, thin-cooking starch derivative—*developed by National through chemistry*—for finishing rayons and cottons. It is non-congealing. Penetrates quickly at normal room temperature. Forming films that are strong, flexible —*yet smooth and supple to the hand!* Further, films are crystal clear. Prints and colors retain all of their original brilliance.

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CLEARFILM is highly recommended as a crisping agent and extender for use with many thermosetting resin finishes.

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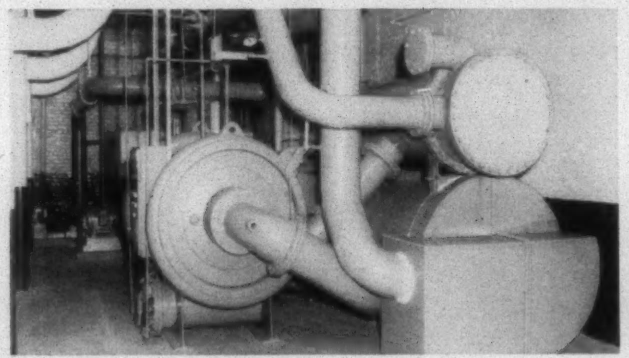
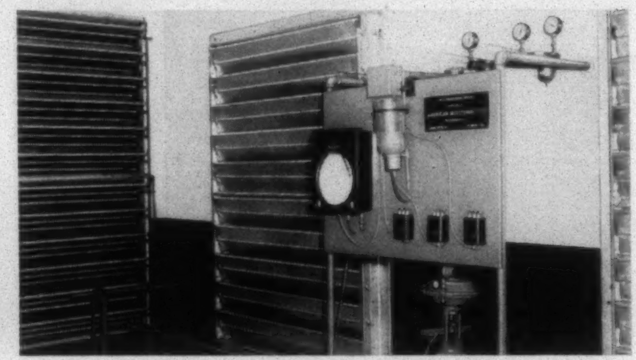
Card room at Highland Park Mfg. Co., Mill No. 1, Charlotte, N. C. Ductwork and zone control atomizers are part of Amco's central station system, designed by J. E. Sirrine Company for the entire mill.



Refrigeration is supplied by a 350-ton Trane Centravac unit located in the basement.



The Amco control panel alongside the fresh and recirculated air louvers.

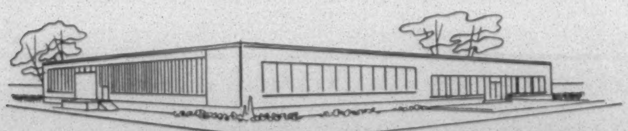
This ECONOMICAL split-system by Amco

provides thoroughly conditioned air, with maximum operating efficiency

Whether your need is for one room, or an entire mill, Amco offers air conditioning to meet your requirements. Amco designs and installs all types of systems — humidification alone; or in combination with cooling, such as in the ductless evaporating cooling system; unit dry-duct systems; or central station systems.

The central station system Amco recently completed at Highland Park Mill is a good case in point. In order to effect savings, it was felt advisable not to install the excess air capacity found in conventional design. Instead, Amco installed a "hand tailored" split system using a smaller central station unit augmented by room atomizers, thus reducing both initial cost and operating cost. This system provides complete control with even greater flexibility of operation. Savings have been substantial.

Amco engineers will be glad to work out a solution to any problem you may have. Next time call on Amco for reliable advice. There is absolutely no obligation.



New Cleveland-Rowan Plant of the American Moistening Company. This modern plant is located at Cleveland, N. C., for the fabrication of duct work and sheet metal products.

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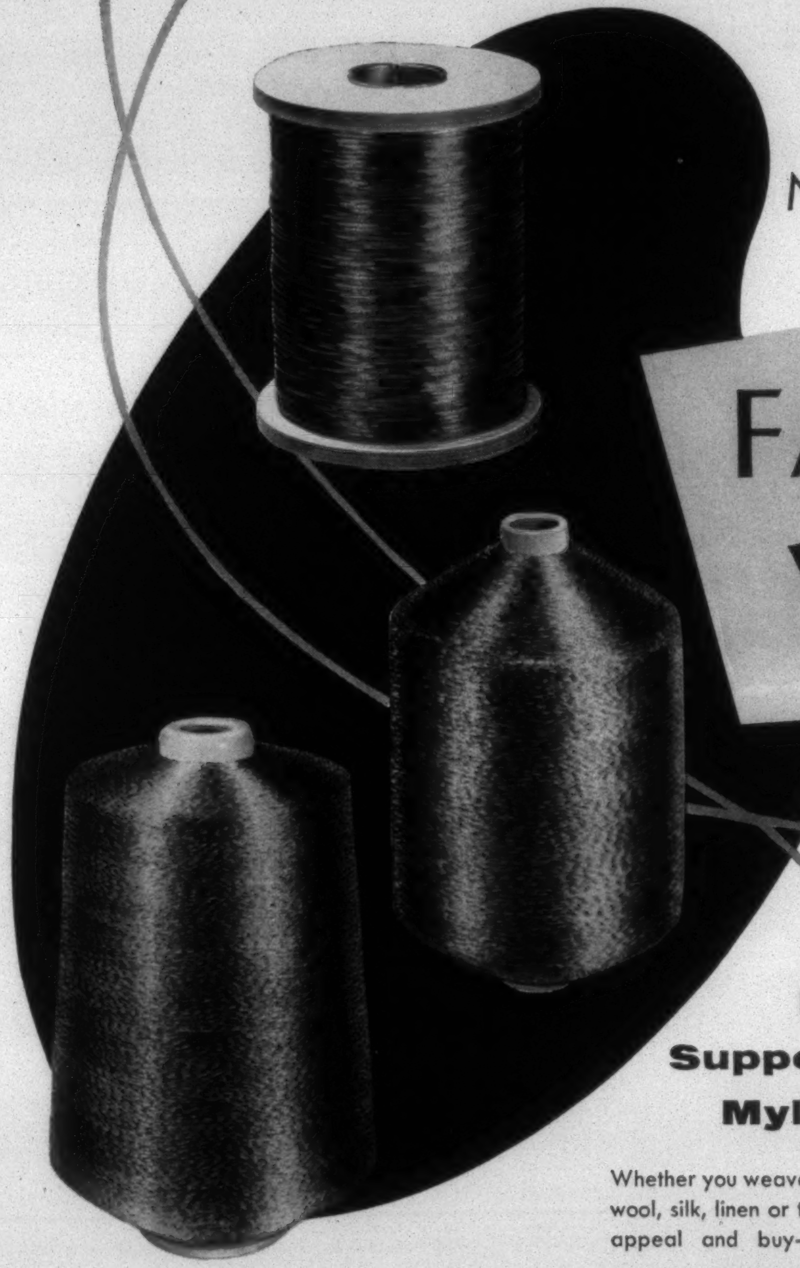

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FAIRTEX® YARNS

Metallic Yarns
Supported Metallic Yarns
Mylar* Metallic Yarns

Whether you weave, knit or crochet . . . whether you work in cotton, wool, silk, linen or the synthetics . . . give your fabrics greater eye-appeal and buy-appeal with new, glittering FAIRTEX Yarns.

These new FAIRTEX Yarns are backed by many years of experience and fifteen months of research and development. To Branson Company's comprehensive knowledge of weaving and knitting has been added Lassiter Corporation's notable proficiency in the plastics field.

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75 YEARS
from CORN

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WHITIN MONARCH* SPINNING FRAME

Produces large yarn packages and completely eliminates roving

Actual mill installation of Whitin Monarch Spinning Frames

COARSE YARN PRODUCTION

The Whitin Monarch Spinning frame is a new type machine for producing very large packages of knotless coarse yarns, from .5's — 8's (cotton count), directly from sliver. The frame features a massive chassis, the famous Whitin two-apron roving drafting arrangement with top arm suspension and weighting, 7″ gauge, up to 5½″ rings, 11″traverse. Either floor or ceiling creels can be used.

It is ideally suited to highly economical production of quality tufted carpet and other coarse yarns from wools, synthetics and blends with fiber lengths from 3″ to 9″.

- **Yarn on bobbin — up to 3.5+ lbs.**
- **Draft range 4 — 50**
- **Accommodates sliver up to 100+gr./yd.**
- **Spindle speeds up to 5000+ r.p.m.**
- **Spinning type cradles**
- **Quik-Set Ratching for instantaneous change of roll setting**
- **Pulleys for four spindle drive**

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WHITIN MACHINE WORKS
FOR 125 YEARS
ONE COMPANY WITH ONE PURPOSE
SERVICE TO THE TEXTILE INDUSTRY
1831 - 1956

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LARGE PACKAGES HAVE ADVANTAGES

in the steps
which **FOLLOW** THE SPINNING

SPINNING

12" Bobbin — 3" Ring — 12 oz. Bobbin
= 1.33 Bob/lb. — 15,000 Yds.
9" Bobbin — 2" Ring — 3.85 oz. Bobbin
= 4.16 Bob/lb. — 5,000 Yds.

3 TIMES As Much Yardage On Bobbin

SPOOLING

TYPE "C" CHEESE	TYPE "D" CHEESE
2.38 LBS.	6.00 LBS.
48,000 YDS.	120,000 YDS.

2.5 TIMES

AS MUCH YARDAGE PER CHEESE

WARPING

54½" BEAM
28" HEAD

54½" BEAM
36" HEAD

28" BEAM	36" BEAM	40" BEAM
530 LBS.	875 LBS.	1,050 LBS.
24,000 YDS.	40,000 YDS.	40,000 YDS.
445 ENDS	441 ENDS	529 ENDS

BEAMS PER CHEESE	BEAMS PER CHEESE	BEAMS PER CHEESE
TYPE "C"-2	TYPE "C"-1	TYPE "C"-1
TYPE "D"-5	TYPE "D"-3	TYPE "D"-3

SLASHING

Assuming 1,200 yds. per Loom Beam

28" BEAM	36" BEAM	40" BEAM
20 Loom Beams Per Set	33 Loom Beams Per Set	**39** Loom Beams Per Set

Average Slasher Creelings per 120-hr. Week

28" BEAM	36" BEAM	40" BEAM
5.68	3.67	**3.16**

TWISTING

2.38 LB. CHEESE	6.00 LB. CHEESE
48,000 YDS. PER CHEESE	120,000 YDS. PER CHEESE

2.5 TIMES
AS MANY BOBBINS CAN BE TWISTED
PER CREELING

Note: 24s Yarn Assumed in All Comparisons

AUTOMATIC SPOOLERS • SUPER-SPEED WARPERS • WARP TYING MACHINES • WARP DRAWING MACHINES

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ROCKFORD • ILLINOIS • U. S. A.

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Osaka, Japan

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Associated Agencies (M'cr.) Ltd.
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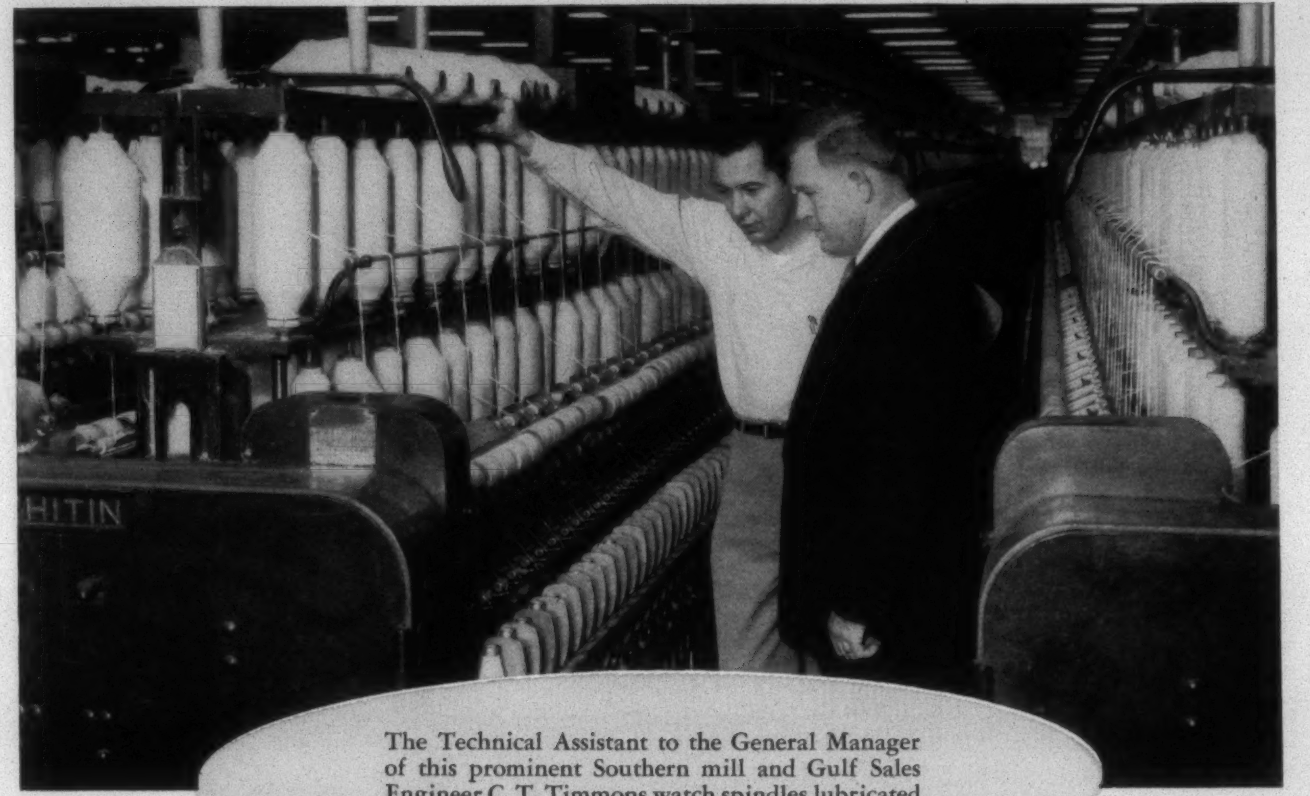
Karachi 2, Pakistan

"Sludge and rust are things of the past with **GULFSPIN OIL** on the job,"

*says this prominent southern mill.**



The Technical Assistant to the General Manager of this prominent Southern mill and Gulf Sales Engineer C. T. Timmons watch spindles lubricated with Gulfspin spin clean and free.

"Sludge, rust, and sticking spindles ceased to be a problem when we switched to Gulfspin three years ago," report mill personnel.

Many other leading textile mills have discovered that Gulfspin contributes to smoother operation, rock-bottom maintenance and power costs. Then too they appreciate the fact that spindle bases don't have to be cleaned so often.

Gulfspin works three ways to keep spindles clean and insure smoother spindle operation: First, it's oxidation stabilized to resist sludge formation. Second, it prevents contaminants from depositing in spindle bases, a major cause of spindle vibration. Third, it provides effective protection against rust—reduces bolster wear.

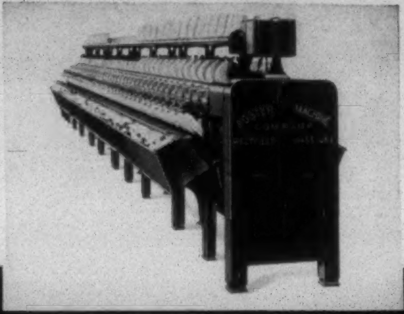
Contact a Gulf Sales Engineer and let him demonstrate Gulfspin's superiority on your frames. You'll find the number of your local Gulf office in the telephone directory.

**Name furnished upon request.*

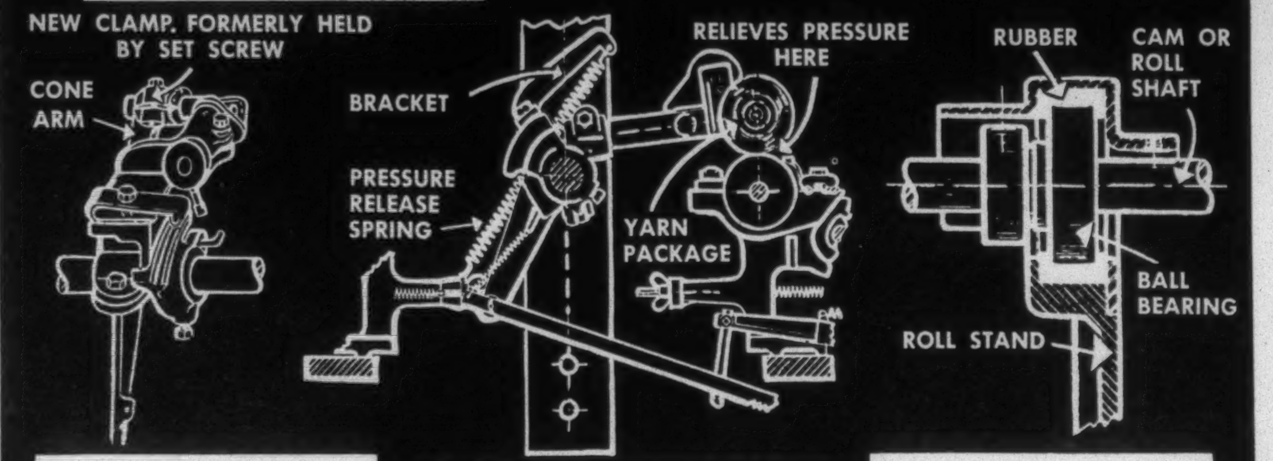
Gulf Oil Corporation · Gulf Refining Company
1822 Gulf Building, Pittsburgh 30, Pa.

GULF

THE FINEST PETROLEUM PRODUCTS FOR ALL YOUR NEEDS



FOSTER
MODEL 102 WINDER



NEW Yoke Assembly

Arm which holds cone or tube spindle is now held with a clamp which can be easily adjusted with a small hand wrench. Once accurately set, arm stays in place. No more pitting and scoring.

NEW Pressure Release Mechanism

Simple, rugged, easily adjustable mechanism now enables you to regulate pressure of yarn package on driving roll, to produce very soft package.

NEW Rubber Boot Assembly

Rubber boots now cover ball bearings on cam and roll shafts — to facilitate alignment, reduce vibration and thus reduce maintenance, prolong life of machine.

Foremost in Flexibility — Continuously Modernized

The Foster Model 102 produces cones with increased taper, assuring free delivery at the knitting machine. It was first to produce the open wind cones most suitable for knitting and will wind any type or count of spun yarn . . . will provide 9 different angles of wind from 9° to 18°, just by changing a few gears . . . can be readily equipped with a conditioning attachment . . . will produce a variety of cone tapers . . . will wind dyed yarn even when damp . . . can be built to wind 6″ or 7″ traverse knitting cones, warping cones, parallel tubes or dye packages — or short traverse cheeses.

Outstanding flexibility has made the Foster Model 102 preferred choice for many purposes for years. It holds its pre-eminence because our policy of continuous modernization constantly improves on its overall efficiency and its already long life expectancy . . . though improvement on some features may be impossible. A few relatively new improvements are illustrated herewith.

Send for Bulletin A-95.
Complete data — no obligation.

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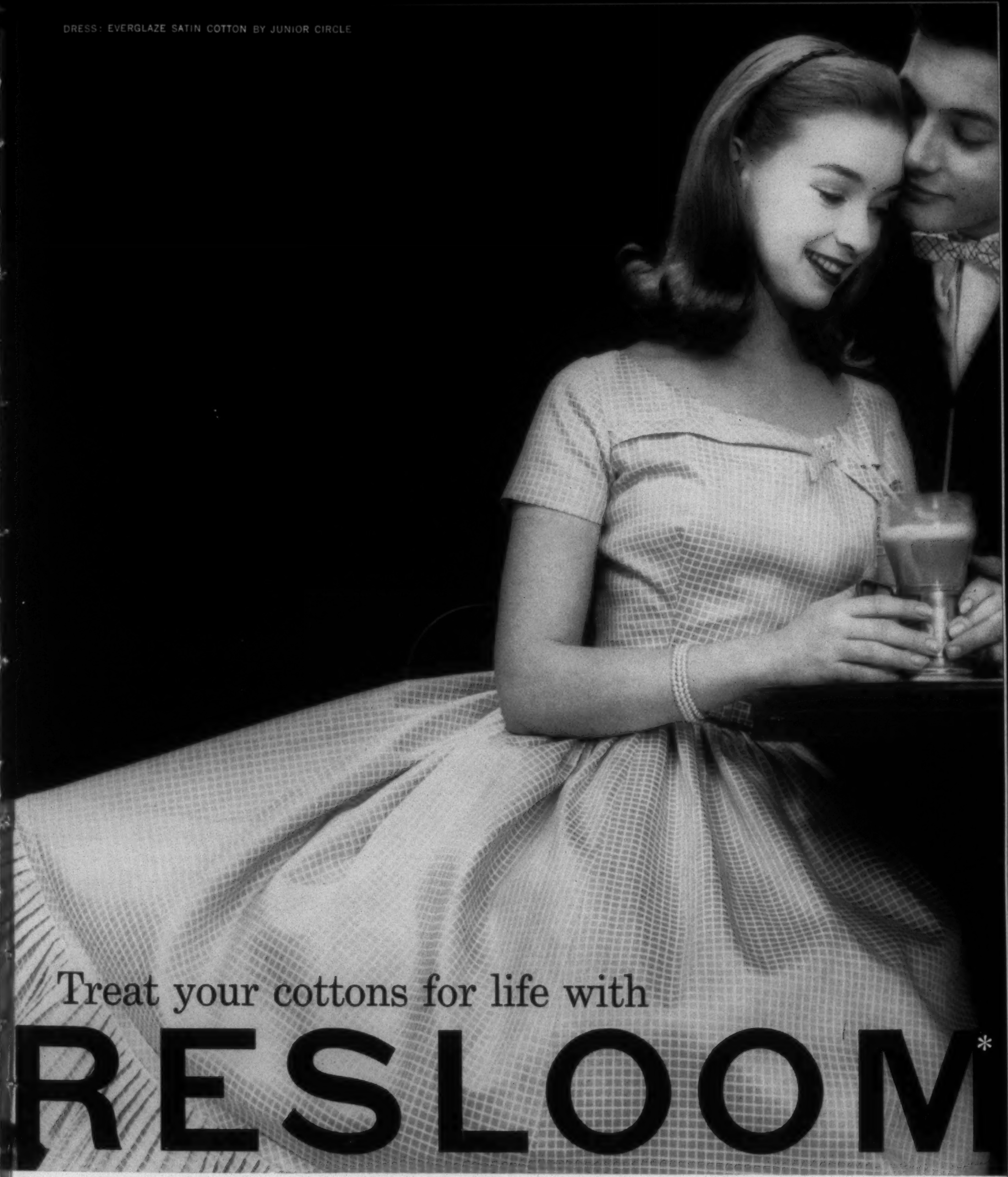
Canadian Representative — Ross Whitehead & Company, Limited, 1475 Mountain St., Montreal, Que. and 35-37 King St., Toronto, Ont.

European Representative — Muschamp Textile Machinery Limited, Keb Lane Bardsley, Oldham, England

DRESS: EVERGLAZE SATIN COTTON BY JUNIOR CIRCLE



Treat your cottons for life with

RESLOOM*

Supplied by Monsanto in both melamine and cyclic urea types

MONSANTO®

*RESLOOM: REG. U. S. PAT. OFF.

For finishes requiring a melamine resin, top results are obtained with Resloom HP or M-75. For finishes requiring a cyclic-urea formaldehyde, Resloom E-50 meets the most exacting standards.

Still other finishes are obtained with outstanding success by using a "blend" of the two types.

All of Monsanto's Resloom textile resins have this in common: They impart a finish that does not wash out. Treated cottons keep their dimensional stability and wrinkle recovery for life.

The reason is simple. Resloom resins do more than coat the surface. They are deposited inside absorbent fibers where they actually modify fiber characteristics.

Get impartial counsel. A Monsanto representative will be glad to work with you on your cotton finishing problems. Write Monsanto Chemical Company, Plastics Division, Room 1018, Springfield 2, Massachusetts.

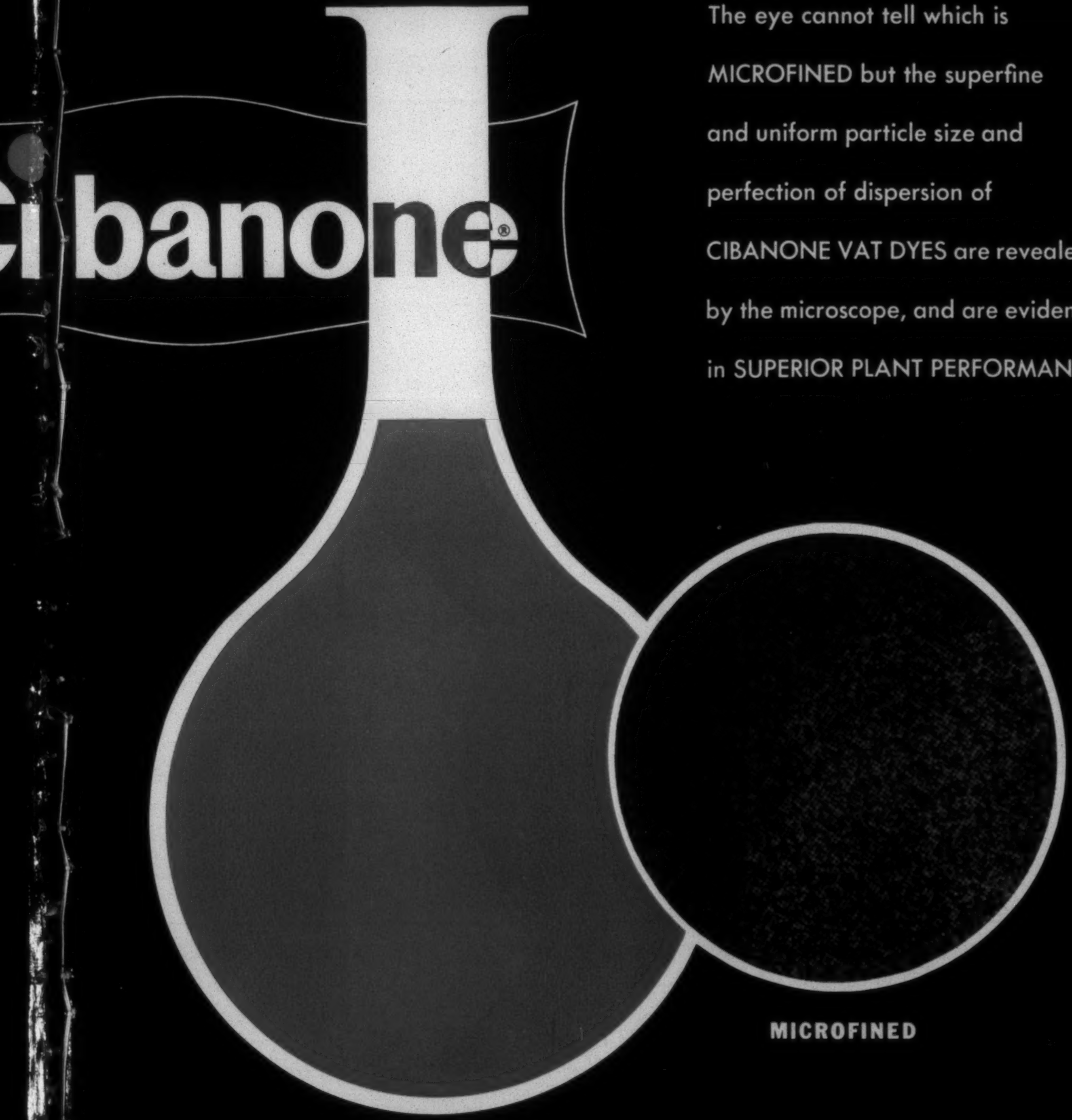
Which Vat Dye is

Ci

Ordinary

THE BEST VAT DYES

S MICROFINED?®



The eye cannot tell which is MICROFINED but the superfine and uniform particle size and perfection of dispersion of CIBANONE VAT DYES are revealed by the microscope, and are evident in SUPERIOR PLANT PERFORMANCE.

MICROFINED

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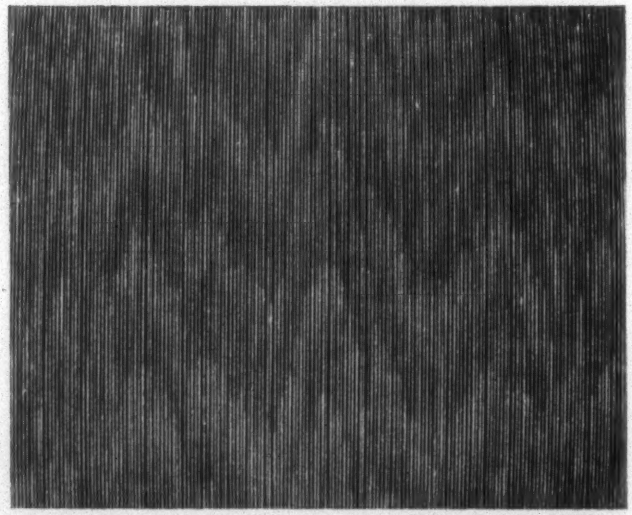
Compare!

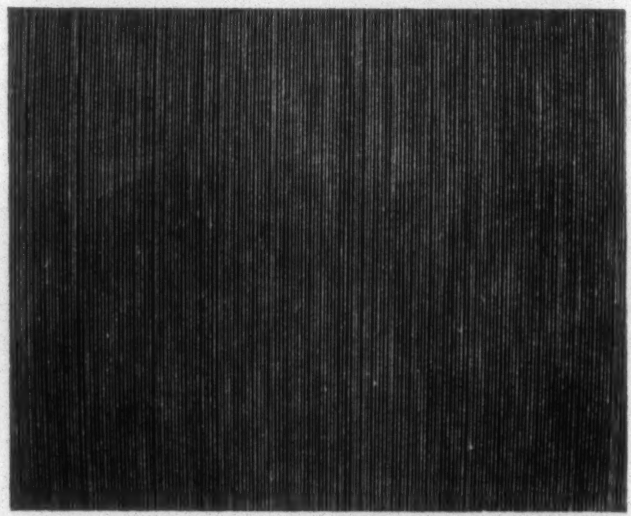
performance proves

WITH OVER 1000 FRAMES OF N/Y ROLLS IN OPERATION, MILLS REPORT UP TO 40% LESS VARIATION



CROOKED ROLL PATTERN

Are you having yarn variation caused by crooked rolls?



WITH N/Y ROLLS—NO PATTERN

We have the answer to your problems. No crooked roll pattern with Norlander-Young Case-Hardened Drafting Rolls.

Twenty years of experience in precision engineering and manufacturing have gone into the Norlander-Young drafting rolls. For quality and precision, diameters are held to .0015″. For straightness, runout not to exceed .003″.

Nearly Fifty Years of Service and Quality *Twenty-five Years in the South*

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GASTONIA, NORTH CAROLINA

FLUTED ROLLS FOR SPINNING • FLYER FRAMES • COMBERS • DRAWING & LAP MACHINES

Du Pont's "Latyl"* Dyes for "Dacron"* and blends with "Dacron"

FOR BEAUTIFUL FULL SHADES on fabrics of "Dacron" polyester fiber, be sure to use "LATYL" dyes. They were developed specifically for "Dacron" and blends with "Dacron" . . . show good resistance to fading from light and atmospheric gas fumes . . . have excellent washfastness. All "LATYL" colors are mutually compatible and may be applied by carriers, by high temperature dyeing, or by the Thermosol method. Technical information is yours by writing E. I. du Pont de Nemours & Co. (Inc.), Dyes and Chemicals Division, Wilmington 98, Delaware.

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Du Pont Dyes

DU PONT

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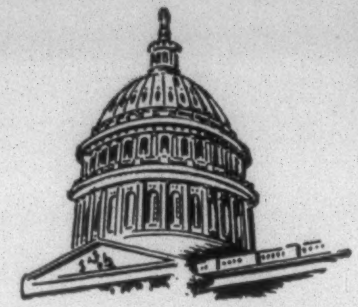
BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY



WATCHING WASHINGTON

[Exclusive and Timely News from the Nation's Capital]

While Congress is charged with "doing nothing" in this session, it has rolled up a sizable record in not passing objectionable bills. It has not gone in for more big public power grants and irrigation projects, and new billions of dollars to stretch the welfare clause of the Constitution have not been forthcoming, either. Chief difficulty in Congress is that federal spending has become so complex and far-reaching that only members of a committee that handle a proposal know what it really means. Some spending bills are voted on and passed in eight or ten minutes in a House or Senate session.

Union leaders generally have given up hope of amending the Taft-Hartley Law now, but they do wish to "water it down" in succeeding acts relating to government grants. The intent is to write in provisions of the Bacon-Davis minimum wage act, and to apply "prevailing wage" theories which will circumvent Taft-Hartley provisions, and ultimately give a new interpretation and aspect to that law. The technique involves compulsory unionism drives on neutral and small business concerns.

A high-geared organizing campaign, led by the teamsters' union firebrand, James Hoffa, is being launched in the South to sign up truckers. Another aim is to sign up longshoremen in Southern ports. Hoffa's aim is to organize both teamsters and dock workers in the South, and to establish a boycott in Northern ports against movement of shipments from Southern ports that have been handled by non-union workers, or trucking firms not signed up with the union.

Right-to-work laws in 18 states are admittedly a high hurdle for union organizers to climb in carrying on new drives. While the unions are mobilizing for a new effort to repeal these laws, the issue for enactment is rising in several states that do not have them. At least 15 other states are expected to have attempts in the next sessions of their legislatures, or through statewide referendums, to pass such laws.

The Supreme Court has agreed to review a lower decision whether a labor union may engage in "slow downs" and other harassments to back up its bargaining demands. The case arises in a ruling that the Textile Workers of America, C.I.O., was not guilty in failing to bargain in good faith when it used harassing tactics against the Personal Products Co. in Chicago. N.L.R.B. held the union at fault, but the District of Columbia Circuit Court of Appeals said Congress "did not limit the use of economic pressure in support of lawful demands."

Dave Beck's rule in the teamsters' union is more openly challenged by the invasion of gangsters than at any time in the last 40 years. The union has a large number of regional councils that are virtually autonomous, and racketeers have been seizing control of them, and defying Beck to oust them. The rich teamster union, with 1.5 million members and dues of $2.50 a month, is especially inviting to the bands of racketeers breaking into the union field.

Internal stresses and strains arising in the new A.F.L.-C.I.O. are putting restraints on proposed political activity. In the face of the strong socialistic and "big governmental control" concepts of C.I.O., the chances of a united labor political front are lessening. Jealousies and conflicts have sprung

"I'll bet Joe forgot to specify DILLARD paper!"

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1926 "IF IT'S PAPER" 1956

up down through the lower ranks of the union hierarchy, with local union bosses unwilling to surrender any political powers they have now.

Unions cannot lawfully use dues money, under the Taft-Hartley Act, for direct political support in a federal election. They get around the law by using "political action committees" and "voluntary" contributions, although the money is raised through their dues-collecting machinery. Much of the literature put out by the unions is called "educational," but it has a strong flavor of political propaganda.

Democratic leaders in Northern cities are having trouble in maintaining their alliances with Negro voters, and admit there are deflections to Republicans. Change of these votes could easily bring loss in November of such states as New York, Illinois, Michigan, Ohio and California, even though all Southern states were carried. It could also cause the loss of several Northern Democratic seats in the House.

Not all labor unions are going along with the C.I.O. demand to hurry up integration of schools, and "make civil rights effective." The A.F.L. meat cutters union said that "to bar federal funds from segregated schools would actually delay complete Negro integration in every walk of American life." It said the action "could impose ignorance on white children in some sections," and its more likely effect would be increased racial feeling all over the country.

Democratic leaders are working hard to head off a wide open party split on the issue of integration and holding their hard-won Negro voters in the North. Negro leaders are taking the stand the party platform must be uncompromising for "civil rights," and in denunciation of school segregation. But these two things, coupled together, could lead to a walk-out of the delegations of nine or ten states. Southern leaders are adament to all forms of "meddling" in their dealing with the Negro problem.

Harry Truman will be in command of the Northern Democrats in the national convention, although he has asked that Missouri not send him as a delegate. He says he is not seeking the nomination, although under the law relating to two terms he is exempted, and free to take it if offered. He will have a strong voice in writing the "civil rights" plank and defining the language that deals with school integration.

If the Democrats become deadlocked in their convention, and the nomination is offered to Truman, those who know him well believe he will take it. He has said he neither expects or desires this to happen, but he does want to prevent a party split or prolonged deadlock. He would like to have the role of peace-maker between Northern and Southern factions, and bring them into agreement on a top candidate.

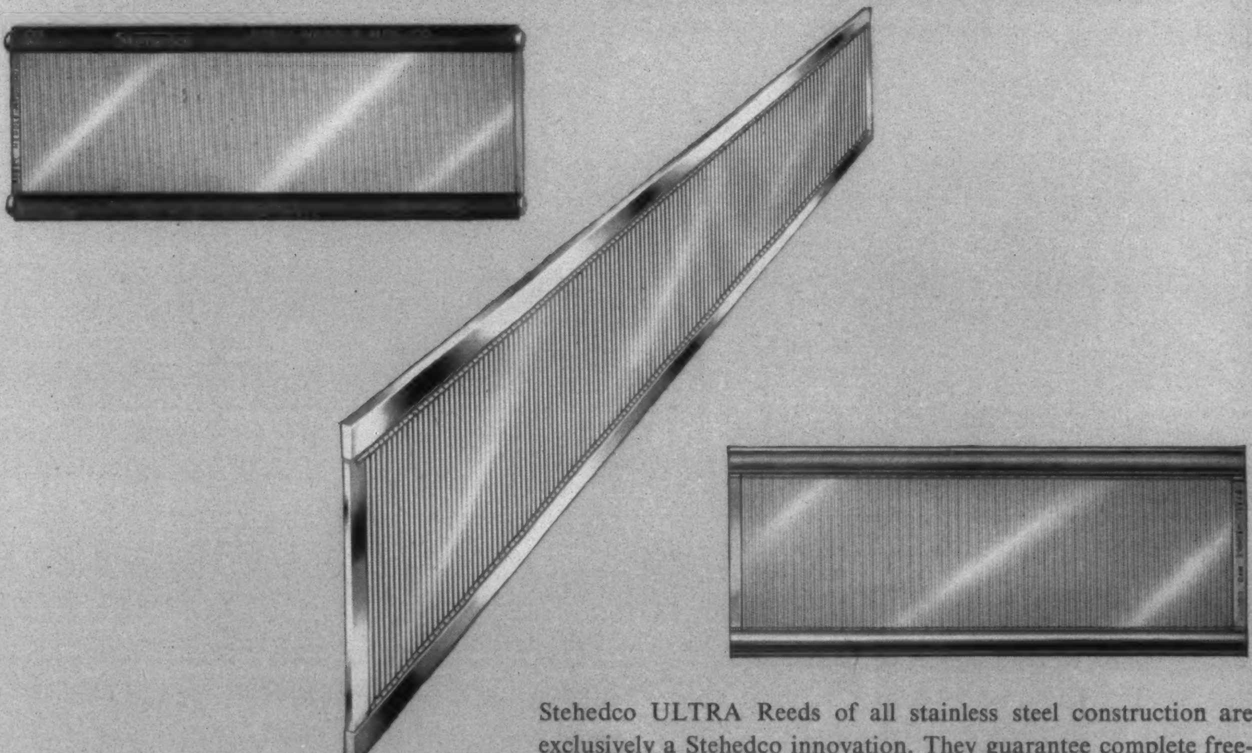
Savagery of the attacks on Senator Eastland, new chairman of the Senate Judiciary Committee, by Communist and radical groups are growing in intensity. Eastland as chairman of the Subversive Activities Sub-Committee is directing hard-hitting investigations that are upturning the underground work of Communists, and dredging up concealed Communists in government, universities and unions. The Daily Worker has been leading the attacks with the cry of "throw the bum out."

Congress has been told that it is "urgently necessary" that this country dispense its economic aid abroad without regard for getting credit for it. The U. N. has stated that nations getting the aid "know their friends, and high-powered self-advertising is not needed." What is really needed, Congress is told, is a multi-lateral distribution of aid through the U. N. "so that the recipients will not be embarrassed in getting the money." Some countries, it was stated, object to anything that is identified as of U. S. origin.

Stehedco *Quality* REEDS

Weave Quality Products

Stehedco Quality Reeds are made with the skill of more than fifty years' experience, precisely to your specifications, to suit your particular requirements. You get exactly what you want without delay because we carry the largest stock of finest finished dent wire, stainless steel and regular, at our five plants located in the heart of the textile areas.



Stehedco ULTRA Reeds of all stainless steel construction are exclusively a Stehedco innovation. They guarantee complete freedom from rust *plus* a decided reduction in dent breakage. For super wear resistance try our fine quality hard chrome plated reeds.

When you buy Stehedco Quality Reeds you get better delivery on any quantity, consistent with finest quality workmanship, because of our greater capacity, larger working force, and modern facilities. You are always assured of complete satisfaction all along the line.

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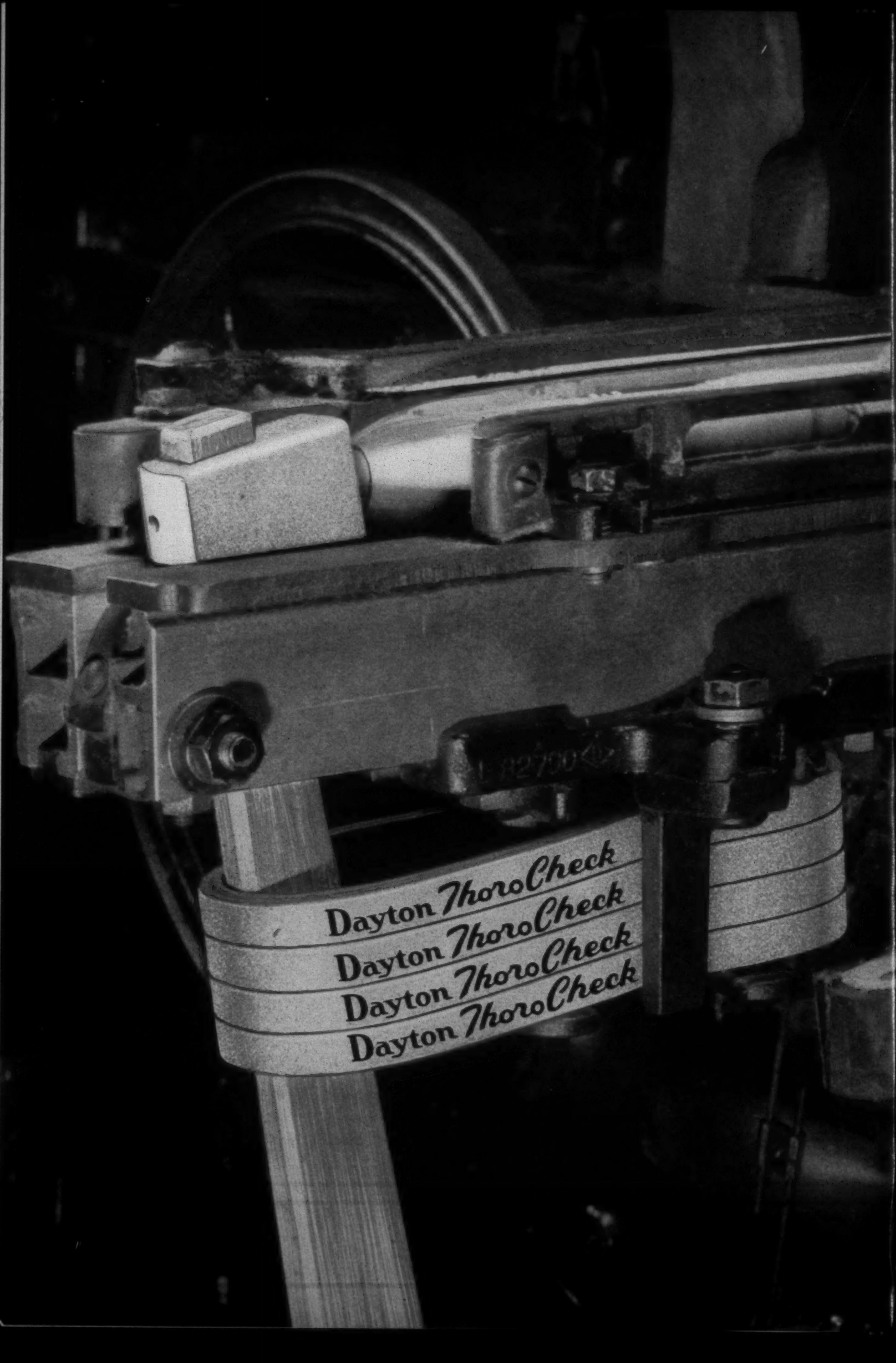

Dayton ThoroCheck
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Improve your Picker Control and save 25 to 50 percent

In Picker and Check Strap Costs!

One mill saved 50% on picker replacement by installing Dayton Thorobred Loop Pickers. It's easy to see why, too. Daytons, molded in one piece, won't break when driven onto the stick.

Dayton Loop Pickers cushion millions of shuttle contacts without strain. And contact is perfect every time because of the slightly tilted, flared-bottom picker stick hole that insures easy, accurate seating and exact fit. Smooth sides and round corners practically eliminate jerked in fillings, save time and money – increase production.

Other mills report 25 to 50% savings in check strap costs with Dayton ThoroCheck Endless Check Straps.

Typical proof: One mill ran Daytons on X-2 looms 24 hours a day, 5 days a week. After 2400 hours, no wear was apparent, no adjustment needed. Other check straps lasted half as long. Revolutionary in design and construction, Dayton ThoroCheck straps eliminate drag over stick, give safe, graduated braking in both directions. Temperature or humidity never affect them, so you're assured fast, Monday starts.

Try Dayton Thorobred Loop Pickers and Dayton ThoroCheck Endless Check Straps on your looms for perfect control, sizeable savings. Your Dayton Representative will arrange a test or write *Dayton Rubber Co., Textile Div., 401 S. Carolina National Bank Bldg., Greenville, S. C.*

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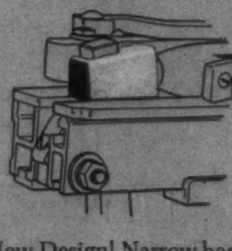
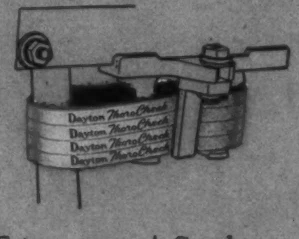
Dayton Thorobred Loop Picker



New Design! Narrow back eliminates wear on lay end strap.

Dayton ThoroCheck Check Straps



Extra economy! Can be replaced singly or in sets.

GOLDEN JUBILEE

Dayton Rubber

50 YEARS OF PROGRESS

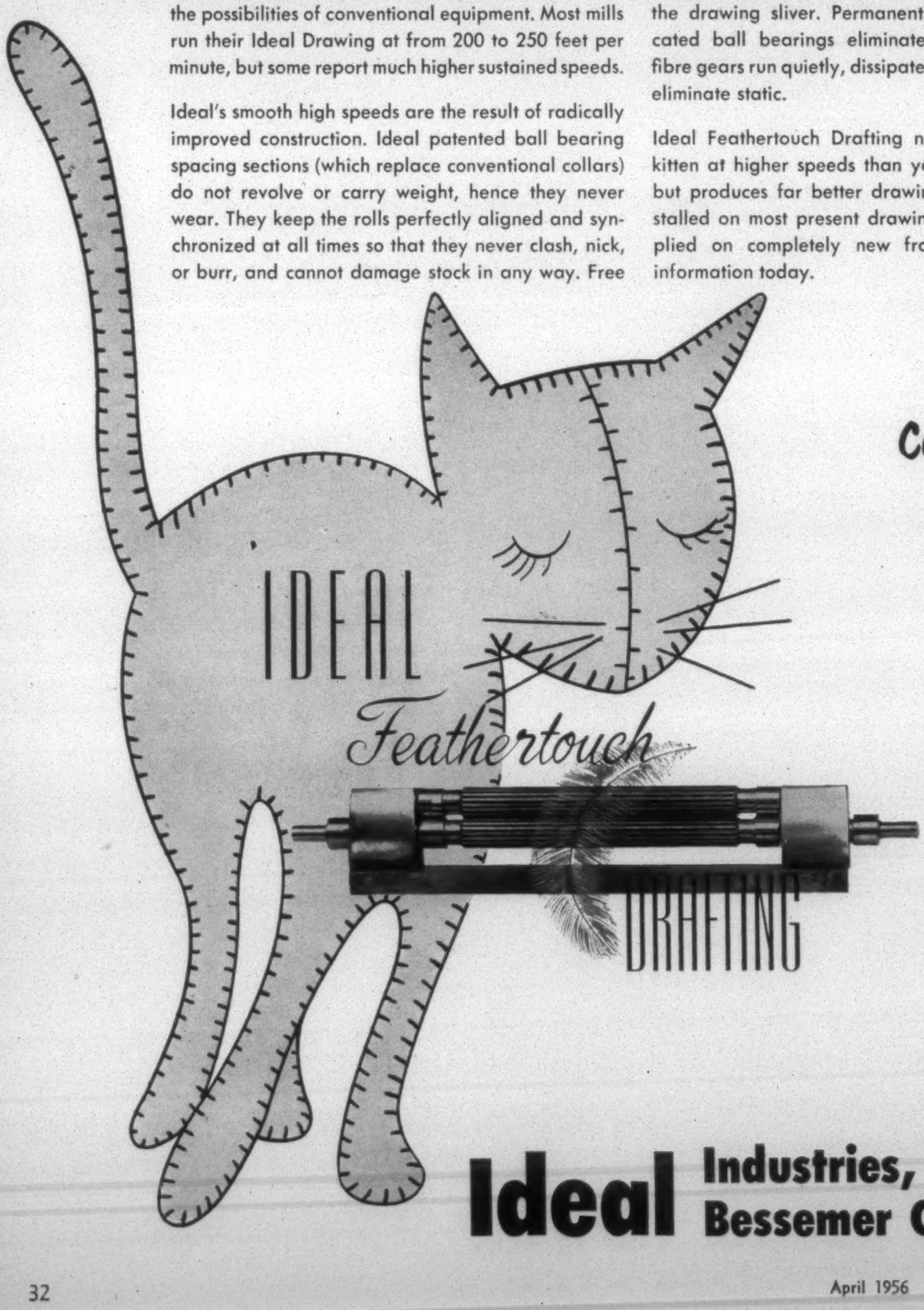
Dayco and Dayton Thorobred Textile Products for better Spinning and Weaving.

Purrs like a kitten
at 450 feet a minute

Ideal High Speed Ball Bearing Drawing* runs smoothly and quietly at sustained speeds far beyond the possibilities of conventional equipment. Most mills run their Ideal Drawing at from 200 to 250 feet per minute, but some report much higher sustained speeds.

Ideal's smooth high speeds are the result of radically improved construction. Ideal patented ball bearing spacing sections (which replace conventional collars) do not revolve or carry weight, hence they never wear. They keep the rolls perfectly aligned and synchronized at all times so that they never clash, nick, or burr, and cannot damage stock in any way. Free floating top rolls automatically adjust to card sliver variations and thus eliminate thick and thin places in the drawing sliver. Permanently sealed and lubricated ball bearings eliminate friction. Laminated fibre gears run quietly, dissipate heat, and practically eliminate static.

Ideal Feathertouch Drafting not only purrs like a kitten at higher speeds than you have ever known, but produces far better drawing sliver. Can be installed on most present drawing equipment or supplied on completely new frames. Write for full information today.



Fine Counts
Coarse Counts
Synthetics
Blends

*Patent Nos. 2,610,363; 2,490,544; 2,412,357. Other patents pending.

Ideal Industries, Inc.
Bessemer City, N. C.

VAT BLUES? ...INDANTHRENE !®

GDC offers a line of more than 20 anthraquinone vat blues—unsurpassed for uniformity of application in all vat dyeing methods. You make your selection with full confidence in our ability to deliver with unvarying reproducibility ... We call your particular attention to these outstanding

INDANTHRENE BLUES

Blue BPF produces the ideal blue shade of outstanding to maximum light fastness and good fastness to chlorine and laundering.

Blue CLN offers excellent chlorine fastness and is especially recommended for light and medium shades on pressure machines because of its very good level-dyeing properties.

Blue GCD of outstanding light fastness and very good wash fastness with good level-dyeing properties.

Brilliant Blue RCL for bright reddish shades with very good fastness to chlorine and laundering.

Green Blue 3G is a very recent addition to the line of exceptional light fastness, excellent wash fastness and superior resistance to weather.

Navy Blue B newest in the line and of excellent light, washing and chlorine fastness; particularly suitable for desirable navy shades.

Navy Blue BRF for bright navy shades with very good light fastness.

Dark Blue BOF for building up navies or as a self shade with very good light, washing and level-dyeing properties.

All brands are available in powder form and also as pastes of "INFRA" quality—finely milled to offer instant and complete dispersion for greater ease of working to produce speck-free light shades. We urge you to investigate these fine products for your color-matching problems.

From Research to Reality ...

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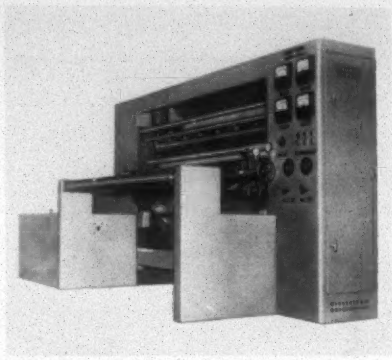
For the Textile Industry's Use

– NEW MACHINERY, EQUIPMENT AND SUPPLIES –

Compacting Machine



Fabric and yarn compacting machine (Riggs & Lombard Inc.)

Riggs & Lombard Inc. reports that it is now in production of a compacting machine particularly designed to stabilize fabrics and yarns against shrinkage by totally new methods. The original purpose for the development of the machine, according to the company, was to come up with a mechanical process for stabilizing fabrics against shrinkage which would give residual shrinkage results comparable to current commercial methods but would offer the advantages of lower initial and operating costs.

In practice, compacting on this machine is said to stabilize against shrinkage a wide range of fabrics and yarns, whatever their fiber or blend content, to acceptable commercial standards or better. Manifold unexpected dividends, however, were revealed in the development period, Riggs & Lombard reports. Full extent of the machine's versatility cannot yet be estimated, it is said, since to date it has revealed a constant succession of capabilities over and beyond those planned by the designers.

The machine as perfected will handle a wide range of weights or types from very light to heavy fabrics, and will handle a variety of yarn counts consisting of any fiber or blend. The surface effect is entirely different from the smooth, calendered, flat surface effect produced by existing mechanical stabilizing methods, Riggs & Lombard reports. This novel surface effect is seen as one of the most important results obtainable with the machine. Not only does it stabilize against shrinkage, but it makes a revolutionary improvement by enhancing the basic structure.

Nubby fabrics when compacted are said to look nubbier, deeper, more "3-dimensional," and to possess greatly improved cover. Patterned weaves have their patterns raised from the base of the fabric, and the pattern outlines take on the appearance of heavy brocades. In brief, treatment on the machine reportedly accentuates the basic weaves and adds dimension in depth.

The machine can be positioned in any continuous production line, it is said, and can be hooked up with conventional equipment. Machine adjustments are simple and control of the degree of compacting is achieved by suitable variable-speed units. Comparatively little floor space (approximately 5′ by 13′ wide for 72″ rolls) is required by the machine. Only connections to power, water and waste lines are needed for operation of the process, with the addition of steam when required for certain fabric types.

Under license from Fabric Research Laboratories Inc., originator of the machine, Riggs & Lombard is sole manufacturer and selling agent for the new machine.

(Request Item No. D-1)

Yale Dumping Attachment

The Yale & Towne Mfg. Co. has announced the development of a special attachment for the transportation and dumping of open bottom bins or boxes. The rotating attachment is in effect a clamp with a single arm through which hydraulic pressure holds the bin or box securely against the forks of the truck on which the attachment is mounted. Any type of container equipped with runners, in a height range from 15½″ to 35″, can be picked up on the forks of the truck, gripped with the upper arm, and dumped by the rotating motion of the attachment. The width of the box section clamping arm is only 3″ giving a minimum of obstruction to the material being dumped. Actual opening range of this new Yale equipment is from 14½″ to 36½″. The hydraulic arm is fitted with a small lip to prevent forward slippage of the load should the track channels be tilted. On a 4,000-lb. capacity lift truck, the attachment can handle a load of 3,000 lbs.

(Request Item No. D-2)

Apple Green Coloray

Courtaulds (Alabama) Inc. announces the production of a new apple green replacing the old color in the company's Coloray range of solution-dyed rayon staple. As reported in previous announcements, Courtaulds claims that the Coloray range of 19 colors shows unequalled fastness to sunlight as is evidenced by the fact that 8 of the colors resist fading up to 500 test hours in South Florida sunlight. Courtaulds stated, however, that it is the company's policy to strive for continued improvement of the already excellent fastness properties of the Coloray range.

In line with this policy, the company announced that although in fastness to light the new apple green received the highest rating of the A.A.T.C.C.—Class L-8 (320 hours)—tests on the new color were continued in South Florida up to 500 hours without significant fading resulting either on direct exposure or under glass. This brings to 9 the number of 500-hour colors in the Coloray range. The 500-hour rating of the new apple green compares with the rating of the old apple green of Class L-7 (160 hours) under glass, and Class L-6 (80 hours) on direct weather exposure. Furthermore, the new apple green shows considerable improvement in resistance to peroxide bleaching (now Class 5); in resistance to perspiration (now Class 5); and in fastness to dry cleaning (now Class 4), the company points out.

(Request Item No. D-3)

Caster Swivel Lock

The Rapids-Standard Co. Inc. has introduced a new caster position swivel lock which adds versatility to its extensive line of casters. In a matter of seconds, a Rapistan swivel caster can become rigid by turning a special pin on the caster, the company reports. When the pin is moved, a cam-operated plunger enters a special notch in the yoke base of the caster rig and sets the caster in a rigid position. Full information on this new improvement and the entire Rapistan line of casters can be obtained by using this journal's reader service postal reply card.

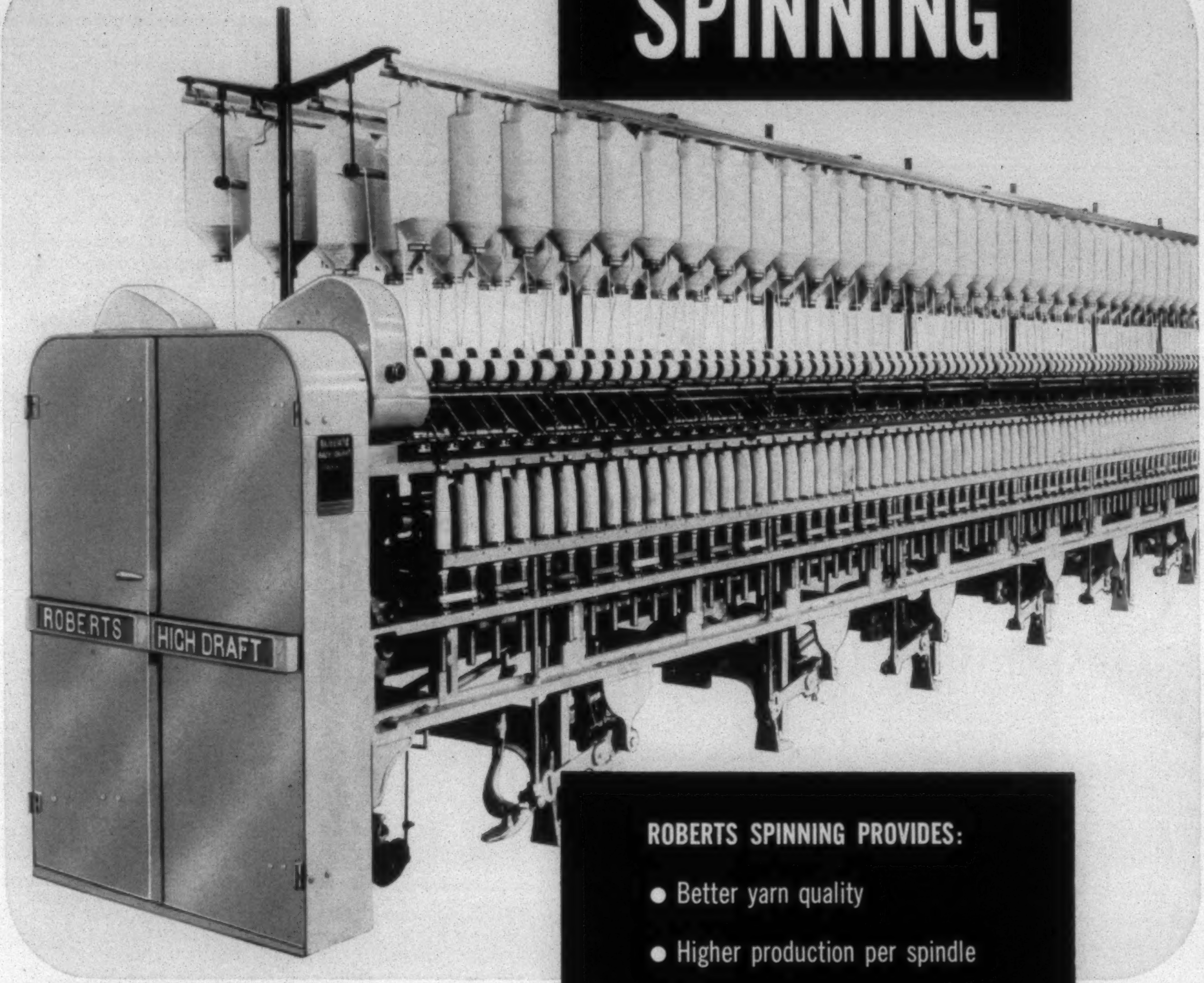
(Request Item No. D-4)

Barrel Handling Truck

Ezy-Rol Barrel Cart (Valley Craft Products Inc.)

A drum and barrel truck, which is said to make it possible for one operator to easily place heavy drums on pallets, has been announced by Valley Craft Products Inc. Designated Ezy-Rol Barrel Cart, the manufacturer states that the design of this cart allows the truck's shoes to be placed on edge of the pallet so that in one forward motion the drum can be elevated to the pal-

ROBERTS SPINNING



ROBERTS SPINNING PROVIDES:

- Better yarn quality
- Higher production per spindle
- Increased package sizes
- Lower maintenance expense
- Lowest first cost

COMPARE ALL 3

For high production, top yarn quality, and dependability, Roberts Spinning is second to none in America today—and, at the lowest investment per spindle!

2¼ MILLION SPINDLES

In Changeovers and complete Frames—Roberts Spinning has been overwhelmingly accepted by American mills—over 2¼ million spindles now equipped with ROBERTS HIGH DRAFT.

Available in 39 inch, 36 inch and the new Roberts 25 inch width Frames.

All standard features used on Roberts Spinning Frames can be adapted as Changeovers to your existing frames.

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SANFORD, NORTH CAROLINA

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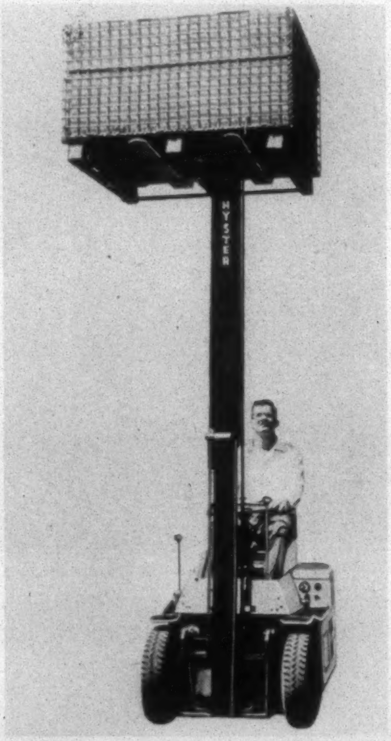
let with a minimum of operator effort. It is also said that drums can be safely lowered from pallets with this cart.

Another feature claimed for this cart is its spring-operated chime hook which drops over the barrel edge as the truck is moved against the barrel without the operator touching either the hook or the barrel. The main frame of this barrel truck is constructed from heavy steel tubing with a 1"-dia. axle. It is also available in aluminum where light weight is a factor such as in delivery service. Wheels are equipped with ball bearings to provide easy rolling regardless of temperature or weather conditions. Solid rubber tires or pneumatic wheels are optional. (Request Item No. D-5)

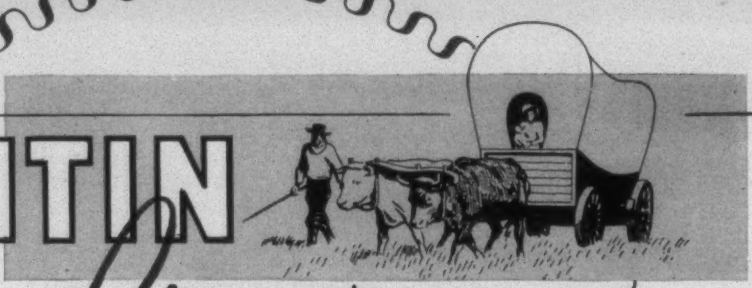
Hyster Monomast Lift Truck



2,000-lb. capacity Monomast lift truck (Hyster Co.)

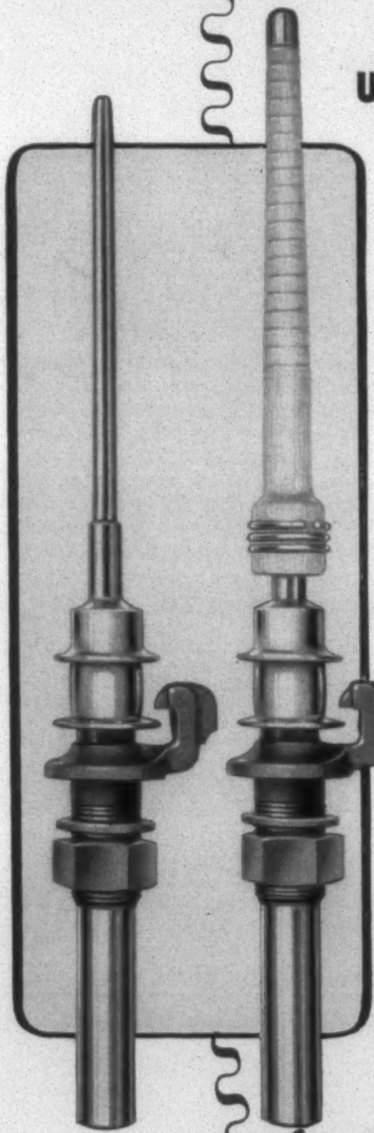
The Hyster Co. reports that the many operating advantages of the exclusive Hyster Monomast lift truck are now available for the first time on a pneumatic-tired truck, the Hyster QN-20 of 2,000 lbs. capacity at 24" load centers. Announcement of this new model follows the 1955 introduction of the solid-cushion-tired Hyster UC-30 and YC-40 Monomast lift trucks.

The compact new Hyster QN-20 Monomast lift truck is said to be an ideal "work horse" for both inside and outside production. Specific operating advantages, the result of single-upright "panoramic visibility," reportedly include faster load placement, reduced driver fatigue and greater safety. Rigidity and stability factors of the Hyster Monomast upright assembly are reported to be unexcelled. Compactness and maneuverability permit the Model QN-20 to work rapidly in narrow aisles and crowded ware-



WHITIN *Pioneer** SPINDLES for Spinning

UNEQUALLED for PERFORMANCE PRODUCTIVITY • LONG LIFE



For outstanding performance, productivity, and low cost of operation, Whitin PIONEER Spindles for spinning are specified by leading mills. Their design, construction, and manufacture are the result of more than a century's experience.

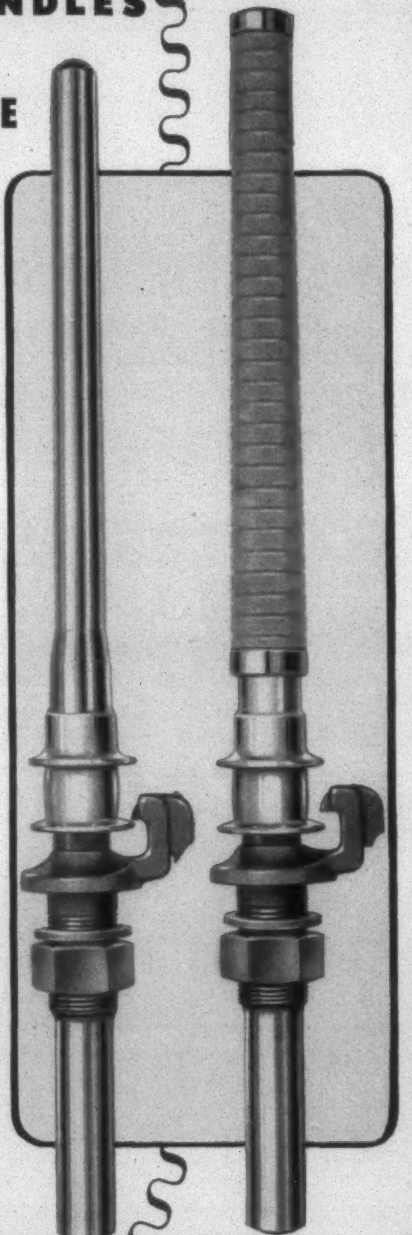
◀ TOP DRIVE TYPE**

Whitin's newest spindle for wood filling bobbins drives the bobbins from inside the bobbin nose or top. Thoroughly tested in large installations in several mills, it provides many attractive advantages over conventional cone drive filling spindles.

- **Increase of 15-20% in spindle speed**
- **Approximately 10% more yarn on the bobbin**
- **Improved bobbin wind secured through better tension**
- **Bobbin centralizing on own axis means less vibration**
- **Improved spinning production and quality**

**ALUMINUM SLEEVE TYPE ▶

This spindle for paper tubes is acclaimed by the users of approximately 2,000,000 as unmatched for its long wear, simplicity in plumbing and maintenance, smooth running characteristics, and extremely low lubrication costs.



* Trade-Mark

** Anti-Friction, of course

Whitin MACHINE WORKS

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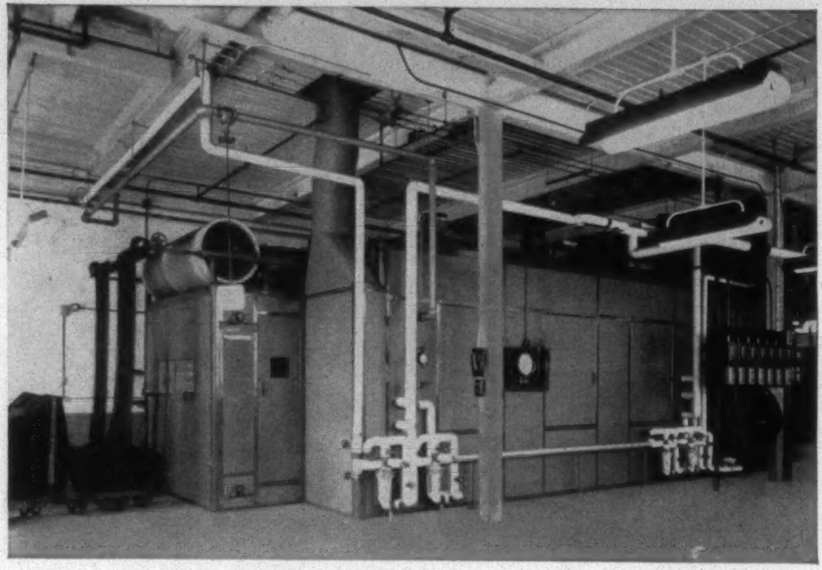
CURE TEXTILE FABRICS
AT A PROFIT!



Installation view of Proctor Loop Curer

- ★ **Greatest Curing Uniformity**
- ★ **Improved Design**
- ★ **Maximum Capacity with Minimum Power Requirements**
- ★ **Flexibility of Operation**
- ★ **Simplified Installation**

THE Proctor

LOOP CURER and ROLLER CURER

These rugged, high-capacity machines feature the latest design and construction improvements—all geared to increase your profits. Units can be combined with existing equipment to meet your exact requirements. For fabrics that will not handle properly in loop, the roller curer is recommended. Recent developments for this machine also include improved air distribution, flexibility in holding capacity, and no-stretch operation. These machines are the result of long experience in supplying machinery to the textile industry. For the complete story of the profit-making opportunities offered by Proctor, write today for latest information bulletins.

WRITE FOR DETAILS. PROCTOR & SCHWARTZ EQUIPMENT FOR THE TEXTILE FIELD

AUTOMATIC BLENDING SYSTEMS • WEIGHING FEEDS • PICKERS • SHREDDERS • BALE BREAKERS • SYNTHETIC CARDS • GARNETTS • DRYERS FOR FIBROUS MATERIAL • YARN DRYERS • HOT AIR SLASHER DRYERS • CLOTH CARBONIZERS • ROLLER DRYERS AND CURERS • LOOP AGERS FOR PRINT GOODS • TENTER HOUSINGS • OPEN-WIDTH BLEACH SYSTEMS FOR WOVEN FABRICS • MULTIPASS AIRLAY DRYERS • NYLON SETTING EQUIPMENT • CON-O-MATIC WASHERS • CONTINUOUS BLEACH SYSTEMS FOR PRODUCING TUBULAR KNITS • EQUIPMENT FOR "REDMANIZED"® SHRUNK-TO-FIT FABRICS • CARPET DRYERS

Proctor

PROCTOR & SCHWARTZ, INC.
Philadelphia 20, Pa.
Manufacturers of Textile Machinery & Industrial Drying Equipment

house areas. The lift truck is powered by a heavy-duty air-cooled Wisconsin gasoline engine and is equipped with pneumatic tires for dependable performance on all surface conditions.

The complete line of Hyster hydraulic attachments can be readily mounted on the attachment carriage, the company points out. Hyster LP-Gas conversion kits are also available. The upright assembly can be field installed on current Hyster QN-20 models. The new truck will be displayed, with the complete line of Hyster industrial trucks and attachments, at the Material Handling Institute's Exposition of 1956, June 5-8, in Cleveland, Ohio. (Request Item No. D-6)

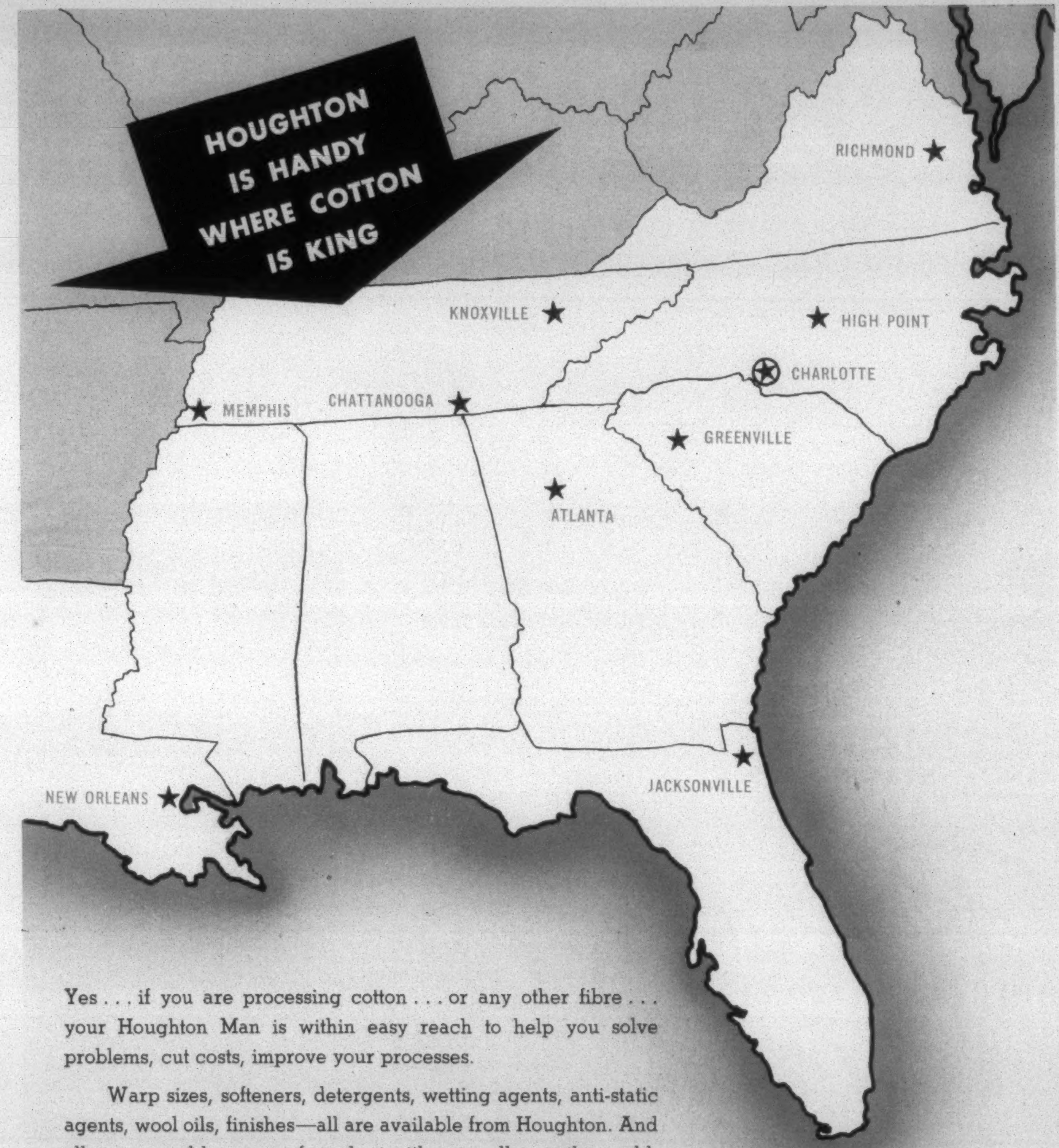
Cibalan Black BGL

Ciba Co. Inc. has announced the development of Cibalan Black BGL, a new direct dyeing color said to be the first straight black of its kind. According to the manufacturer, the new color meets all the high dyeing and fastness standards of the Cibalan group. It reportedly yields clean, neutral shades of gray and black on wool, nylon and silk. Providing excellent fastness and level shades by dyeing, padding or printing, Cibalan Black BGL shows good affinity in neutral or slightly acidic dyebath and requires no chroming, development or other aftertreatment. Light fastness on wool is said to be especially good. The new Ciba specialty is well suited for fashion shades in combination with other Cibalan dyes, the company reports. (Request Item No. D-7)

Marforge Hand Lift Trucks

Market Forge Co. reports that total investment in materials handling can now be reduced over one-half by using the company's newly-developed hand lift truck. The new model makes it possible to employ less expensive skids or pallets, the company points out, resulting in a greater reduction of initial investment than has ever before been possible. The background to this innovation, the company states, can be traced to the period following World War I. Plant floors generally were in such poor condition that lift truck wheel diameters had to be increased gradually from 6" to 11". Today's floors have been improved so that wheel diameter has been reduced to 3¼" on hand lift trucks to move pallets weighing as much as 6,000 lbs. per load. However, since most power fork trucks handled heavy loads, pallets had to be made with 3 runners for support, calling for a rather expensive hand pallet truck to straddle the center runner. Market Forge engineers reasoned that since 3¼" wheels could be used to move loads up to 6,000 lbs., it certainly seemed logical that the same would apply to loads not exceeding 3,000 lbs. They reasoned further that one of the features making hand pallet trucks so expensive was the fork or open-end design. Their conclusion was to eliminate the forks, returning to the closed-end hand lift truck. The pallet was really no problem. If 3 runners were needed to support 6,000 lbs., then 2 runners should suffice for half that. The result is a

HOUGHTON IS HANDY WHERE COTTON IS KING



Yes . . . if you are processing cotton . . . or any other fibre . . . your Houghton Man is within easy reach to help you solve problems, cut costs, improve your processes.

Warp sizes, softeners, detergents, wetting agents, anti-static agents, wool oils, finishes—all are available from Houghton. And all are proved by years of use by textile men all over the world.

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Ready to give you on-the-job service . . .

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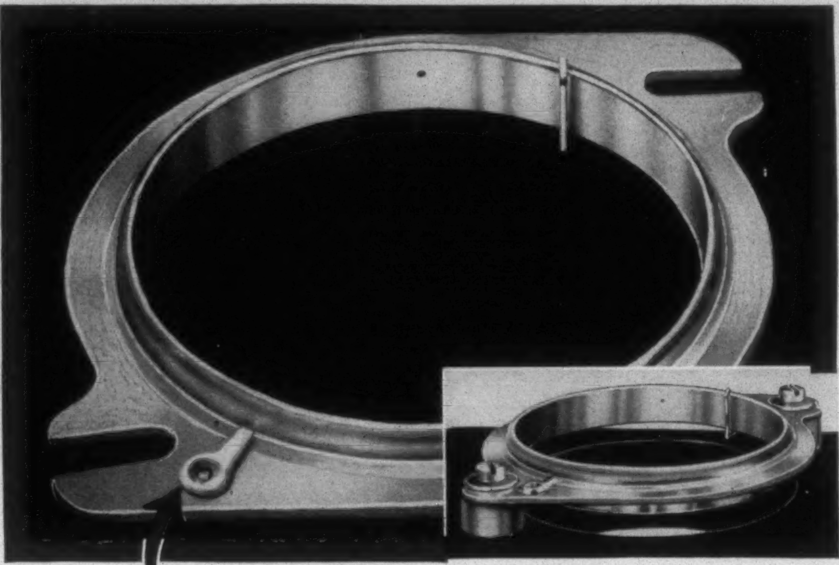
FOR 2 YEARS

OF NORMAL SPEEDS 3-SHIFT OPERATION



OIL HERE
ONCE IN 24 HOURS

Set flush, or above ring rail to avoid fly-loading and caking

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Rings

Even at higher sustained speeds, these rings far outwear machined rings and give balanced traveler wear, but cost no more. Because they lubricate themselves. Because of special heat-treating and super-smooth finish. Because of the unique deep oil-well construction and absence of wicks to carbonize.

They spin worsted, synthetics and mixtures. They twist cottons. Sizes ready: 2¾ x 7/16 and 2¼ x 7/16. Four leading makers are delivering travelers designed for them.

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all styles of spinning, common and vertical twister rings.
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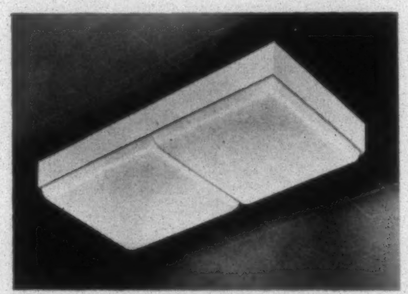
closed-end hand lift truck for loads up to 3,000 lbs., retaining the time-tested hydraulic system, steering mechanism and running gear, in keeping with Market Forge's goal of integrated parts and standardization of units. Also included are the important features of easy handle lifting, ball bearings in wheels, and high lift—in this case 4". High lift, of course, is necessary in lifting skids or pallets with 2x4 runners to avoid running ground on inclines and obstructions. The truck may be furnished with tandem articulated load wheels for rough floors, while booster wheels can be added to handle double-faced pallets. Trucks are furnished in 16", 18", 22", 24" and 27" widths. Lengths of platforms available up to 72". Front wheels are 8" dia., load wheels 3¼". All wheels employ ball bearings, and are available in semi-steel, rubber, plastic and aluminum. Capacity rating is a maximum of 3,000 lbs. (Request Item No. D-8)

Fluorescent Color Matcher



Color Matcher fluorescent lighting unit (Duro-Test Corp.)

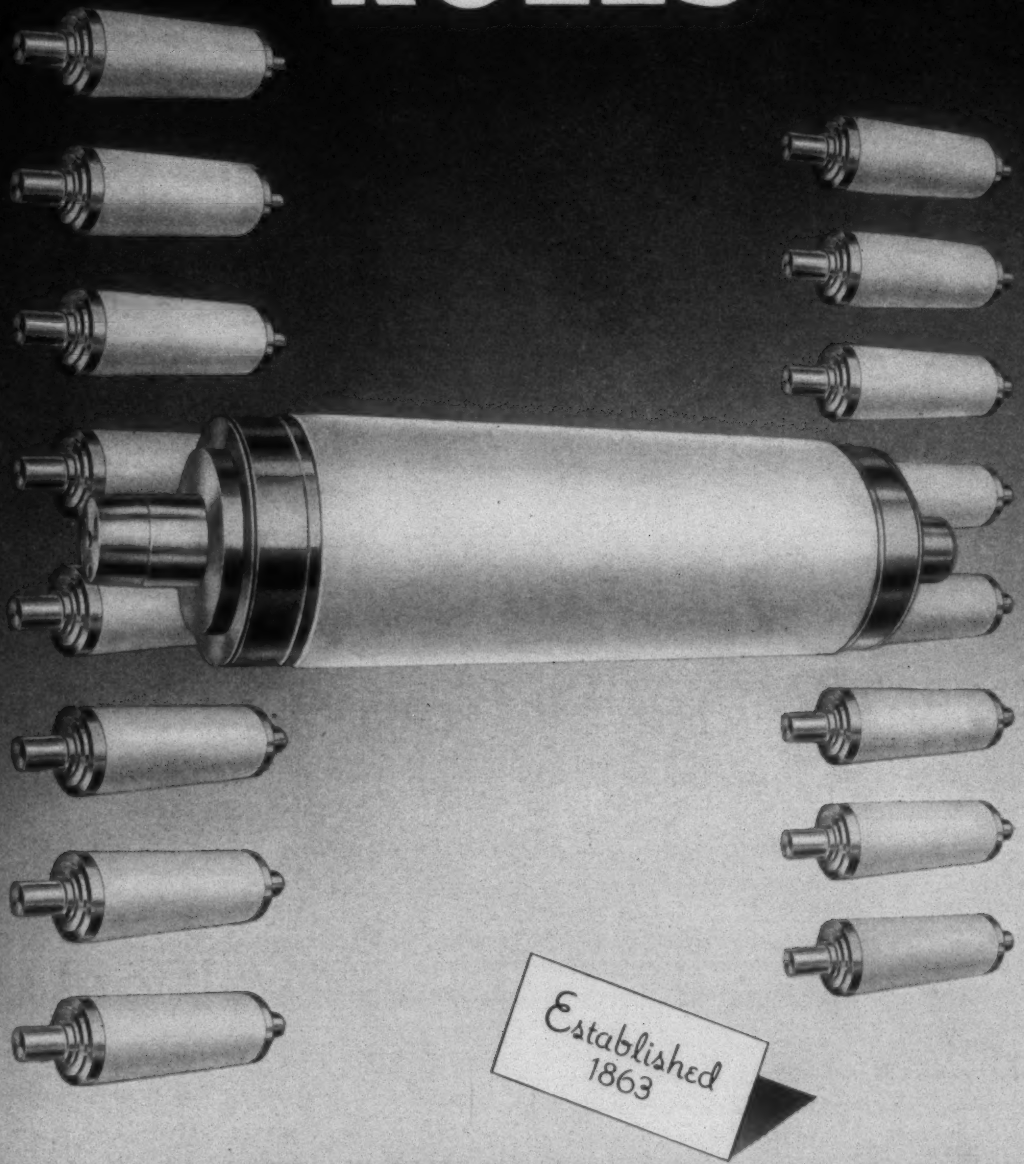
Color Matcher, a new fluorescent lighting unit that reportedly provides the equivalent of natural light entering a North skylight at high noon, said to be the ideal illumination for precision color tasks, has been announced by the Duro-Test Corp. Designed to provide light of the best Kelvin temperature (7,500°) for exacting comparison of colors, the new unit uses a mixture of six 40-watt fluorescent lamps comprised of 4 Super Delux 45 and 2 standard Blue in a Plexiglas and steel fixture. The resulting light covers the full spectrum range. Nationwide field tests have verified its uniform and accurate color rendition throughout the entire spectrum, from blue through green and yellow to red. It also produces strong illumination at working levels—over 75 foot-candles—for optimum visibility. (Request Item No. D-9)

Landis Tape Bonding Machine

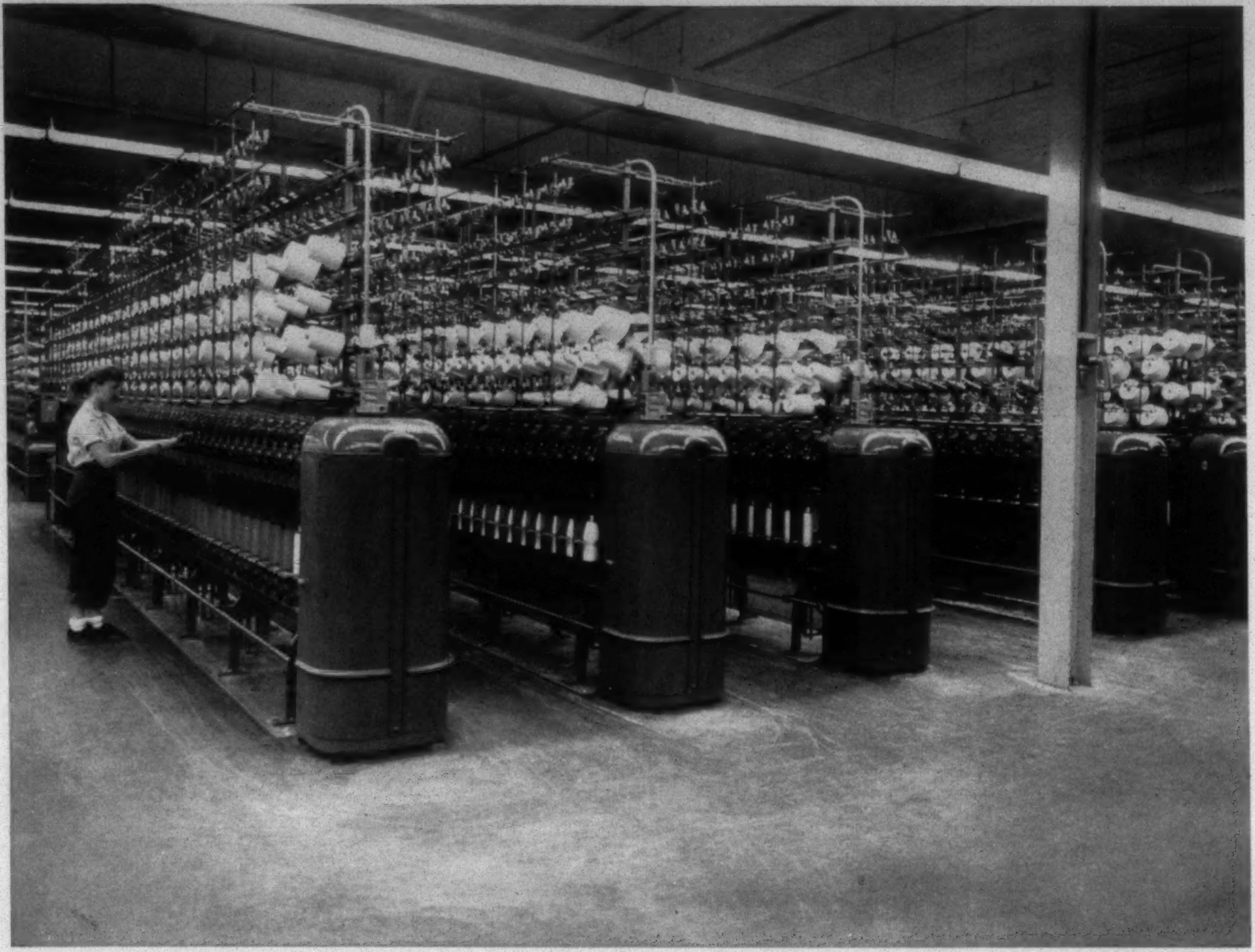
Oliver D. Landis Inc., Charlotte, N. C., announces the development and availability of the Landis bonding machine for use with Lan-Nyl-Bond nylon spinning tape. Features of the bonding unit include permenant bonding of tape splices, improved safety features, better electrical components and longer retention of heat. It is made to be mounted on the standard sewing machine stand.

A further improvement in Lan-Nyl-Bond tape is announced by Oliver D. Landis, president of the company. The tape is now being treated during manufacture to elimi-

"HOLYOKE"
CALENDER
ROLLS



HOLYOKE MACHINE COMPANY
CALENDER ROLLS for the PAPER and TEXTILE INDUSTRIES
WATER FILTRATION EQUIPMENT
HOLYOKE, MASSACHUSETTS



Leesona Model 10 Ring Twisters at the Chatham Manufacturing Company mill in Elkin, N. C. Part of a Leesona 2600-spindle installation used in producing the famous Chatham automotive and apparel fabrics.

Why CHATHAM selected Leesona® Ring Twisters

Mill executive tells how Model 10 machines help maintain quality and cut production costs

Carlyle Summey, Worsted Division Manager at Chatham, says:

"Our fabrics require many combinations of yarns — natural, synthetic and metallic, in ply constructions of from 2 to 6 ends. Leesona Model 10 Ring Twisters do a great job of top-quality twisting for us. Their single and ply end individual stop motions and individual tensioning of each end in the creel make the perfect combination for high efficiency twisting. We get big, well formed take-up packages from our Model 10's — and we get them fast, which saves us time and money in our subsequent coning, quilling and warping operations.

Investigate Leesona Machines

Get *all* the facts. Find out how Model 10 Ring Twisters, or other Leesona Machines, can cut your operating costs and improve your product quality. See your Universal representative or write direct.

23.5.20

UNIVERSAL WINDING COMPANY
P. O. BOX 1605, PROVIDENCE 1, R. I.
Sales Offices: Boston • Philadelphia • Utica • Charlotte • Atlanta • Los Angeles
Montreal, Hamilton, Canada
Winding and Twisting Machinery for Natural and Synthetic Yarns

nate fly pick-up on the spinning frame. Bonding strips for splicing are furnished free with orders of Lan-Nyl-Bond.

(Request Item No. D-10)

Cyan Green Toner

American Cyanamid Co. has announced the addition of Cyan Green Toner 15-3100, a strong, clean phthalocyanine green toner, to its expanding line of durable pigments. Like other Cyanamid phthalocyanines it has high strength and excellent stability to light in exterior finishes, the company reports. Cyan Green Toner 15-3100 is said to have excellent working properties, with good ease of dispersion. It is essentially non-bleeding in organic solvents, shows excellent color stability in both acid and alkaline media and does not migrate in organic media. Cyan Green Toner 15-3100 also has a cleanness of tone which should increase its usefulness as a blending color with suitable yellows to produce varying shades of highly stable greens, Cyanamid states. Chemically, Cyan Green Toner 15-3100 is chlorinated copper phthalocyanine. Physically, it is a finely divided dry powder having a specific gravity of 2.24. It bulks 0.0535 gal./lb. in displacement in composition formulations.

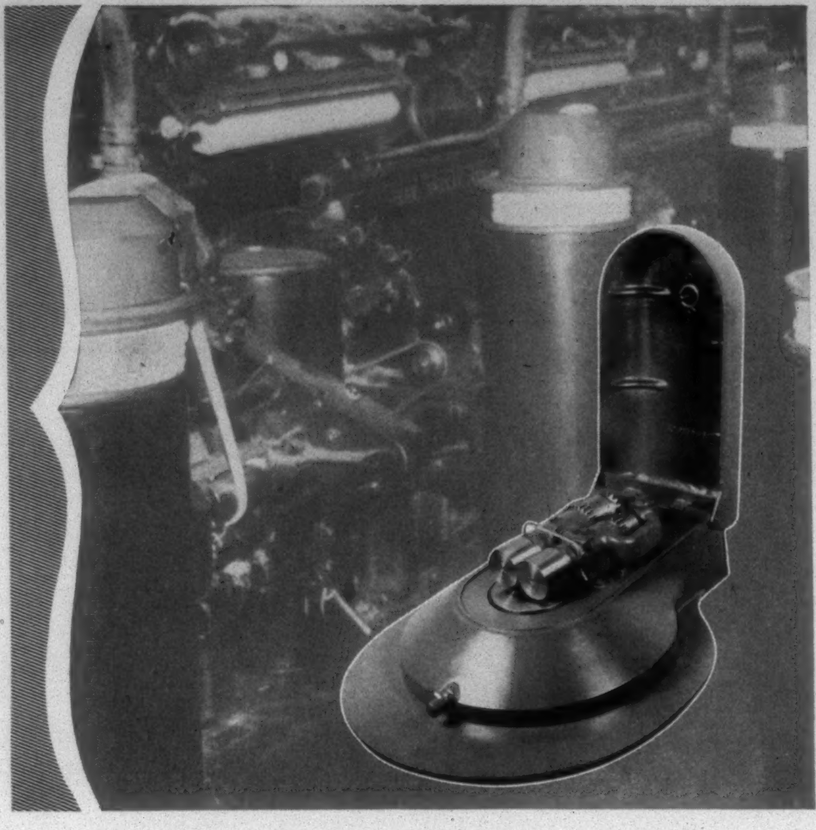
(Request Item No. D-11)

Pressure Oiling System

Lub-O-Jet pressure oiling system (Trico Fuse Mfg. Co.)

Trico Fuse Mfg. Co. is offering a hand pump pressure oiling system called Lub-O-Jet for single or multiple bearing points. Lub-O-Jet is described by the manufacturer as a centrally located, easily accessible, positive, self-contained oiling system that delivers oil, under pressure, to various points of all types of equipment such as line shafts, gears, chains, cams, etc. Applications are said to be practically unlimited.

A pressure pump is built into the 4-oz. shatterproof reservoir. The oil supply is always visible. A 6-outlet distributor is connected to the reservoir assembly. 1/8" O. D. plastic, transparent and flexible tubing is attached to the distributor outlets and run



SOUTHERN STATES COILER HEADS MAKE CONVERSION TO LARGER CANS A SELF-PAYING PROPOSITION

Every mill man with an eye for ways to cut card room operating costs knows the advantages of larger cans. But what some don't realize is that Southern States conversions are so economical that they pay for themselves—a fact proved by case histories of mills throughout the country.

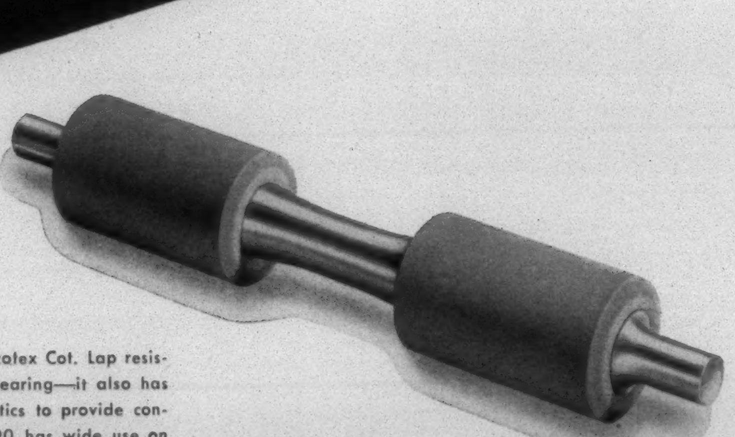
The Southern States Universal Coiler Head, illustrated above, is designed for either 14- or 15-inch cans. It is adaptable to any make of coiler. Using this head, intermediate gearing, coiler base and *your existing stand*, an inexpensive installation can be made in your mill.

Then you can enjoy all of these advantages: simplified oiling; ease of maintenance; smaller parts inventory; more efficient handling; lower operating costs; and improved quality. The photograph shows the simplified design of this head. Notice the streamlined cover and bonnet. Cut tooth gears and oilite bearings are used throughout. It is precision built for years of satisfactory service.

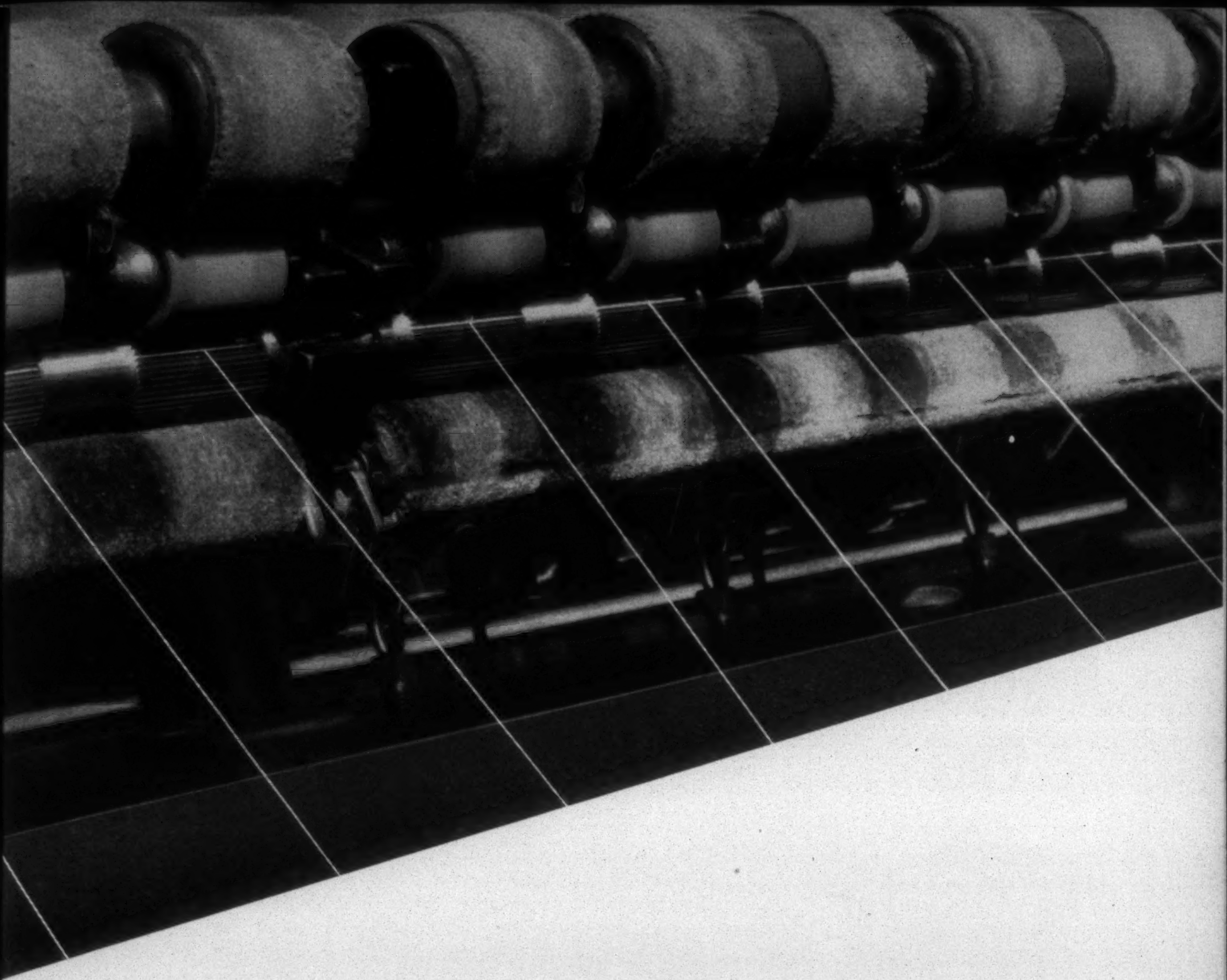
Get full facts from your Southern States representative, or send your request direct to the home office for a quick reply.

SS ®

SOUTHERN STATES
EQUIPMENT CORP.
HAMPTON, GEORGIA



This is the remarkable J-490 Accotex Cot. Lap resistant, clean running, and long wearing—it also has just the right surface characteristics to provide consistently good yarn control. J-490 has wide use on all types of equipment with revolving clearers.



Not a lap-up in sight!

The reason: J-490 Accotex® Cots have built-in lap resistance

In mill after mill, the story is always the same: "Armstrong J-490 Accotex Cots help prevent front-roll lapping." And that's the case whether the mill is spinning natural fibers, synthetics, or blends.

J-490 provides this unusual lap resistance because it's made of a special, patented synthetic rubber compound. Electrolytes built into this compound neutralize the electrical attraction between cot and fiber, eliminating the basic cause of lapping. In fact, J-490 Cots actually tend to repel broken ends.

This cot offers other important spinning advantages, too. Because it contains no rough fillers, its drafting surface is always uniformly smooth. The J-490 won't pull short fibers from the stock and cause excessive ends down. It turns out strong, uniform yarn—year after year.

All that's needed to keep the J-490 Cot spinning like new is an occasional rebuffing. Why not arrange for a test frame next time your Armstrong man calls? And write for the booklet, "Armstrong Textile Roll Coverings and Mill Supplies." Address Armstrong Cork Company, Industrial Division, 6504 Davis Avenue, Lancaster, Pennsylvania.

If eyebrowing is a problem in your spinning room, try the Armstrong NO-742-S Cot. It has a "constant friction" surface that packs waste back under the clearers and stops eyebrows from forming.

Armstrong ACCOTEX COTS

. . . used wherever performance counts

Service Plus

Bill Heacock
Jacobs Service Engineer in Alabama, Louisiana, Mississippi and W. Tennessee

Experience Plus

JACOBS

Quality

Jacobs Hairy Leather Check Straps
Jacobs Leather and Rubberized Fabric Strapping
— boosts production and cuts operating costs in many mills.

Jacobs high quality plus personal loom engineering service is the combination that does it.

The Bullard Clark Company

JACOBS

SOUTHERN
DIVISION
Charlotte, N. C.

NORTHERN
DIVISION
Danielson, Conn.

to the bearing points which can be as much as 100′ away, in any direction. A small amount of oil is fed to all bearings simultaneously each time the pump is stroked. All feed tubes remain filled, ready for the next cycle. Accessories, such as tubing, connectors and clips for quick, neat installation, are available.

Trico points out that Lub-O-Jets save oiling time by eliminating the necessity of stopping production for periodical hand oiling. They promote safety by eliminating ladders and the need for operators to crawl under and reach into machinery. A complete descriptive bulletin—No. 36—is available free. (Request Item No. D-12)

Compact Power Sweeper

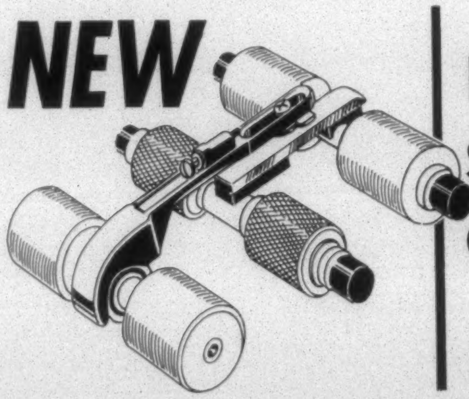
A compact new 28″ rider-type power sweeper for sweeping aisles and congested areas has been developed by the G. H. Tennant Co. It is especially designed for areas in plants where larger sweepers cannot be used. Known as the Model 50, the new sweeper is 60″ long, without sidebrush, and turns in approximately its own length. Traveling at speeds of 2 to 8 m.p.h., it cleans a 28″ path (40″ with optional side brush) and reportedly can sweep up to 80,000 sq. ft. an hour.

Extra-clean sweeping is said to result from a combined brush-plus-vacuum system utilizing high volume airflow. A 28″ main brush, revolving in a vacuum-equipped compartment, hurls dirt and litter forward into a removable dirt hopper. At the same time, a high volume 11″ fan draws dust and fine dirt from brush compartment up into a fabric bag. The new sweeper reportedly drives like a car. Clutch, brake and accelerator pedals are foot-operated, and automatic-type cam and lever steering allows easy maneuvering. A 2-tone high visibility finish is used—light cream above with contrasting orange at the bottom. The machine is powered by a 6.8 h.p. Wisconsin air-cooled engine. Other features: front wheel differential drive; manual clutch and transmission with 2 forward speeds and reverse; 12″ tires front and rear; 4½ cu. ft. dirt hopper; convenient controls for main brush and side brush. (Request Item No. D-13)

Rapistan Caster Models

Two new Rapistan caster models—the pneumatic-tired caster and dual wheel caster —which have been "special order" only until now, have been added to its standard caster line by the Rapids-Standard Co. Inc Pneumatic-tired casters are said to give quieter and smoother operations and also give a cushioned, shock-proof ride. They also are designed to protect the equipment on which they are mounted and reduce vibration. Another feature of the pneumatic-tired caster is its easy maneuverability. Dual wheel casters are equipped with hard rubber tires or Durastan plastic wheels for long wear and have far greater load capacities than single wheel casters, the company

NEW



Dixon Saddle Guide

Leading Mills Cut Costs by Modernizing Their Drafting

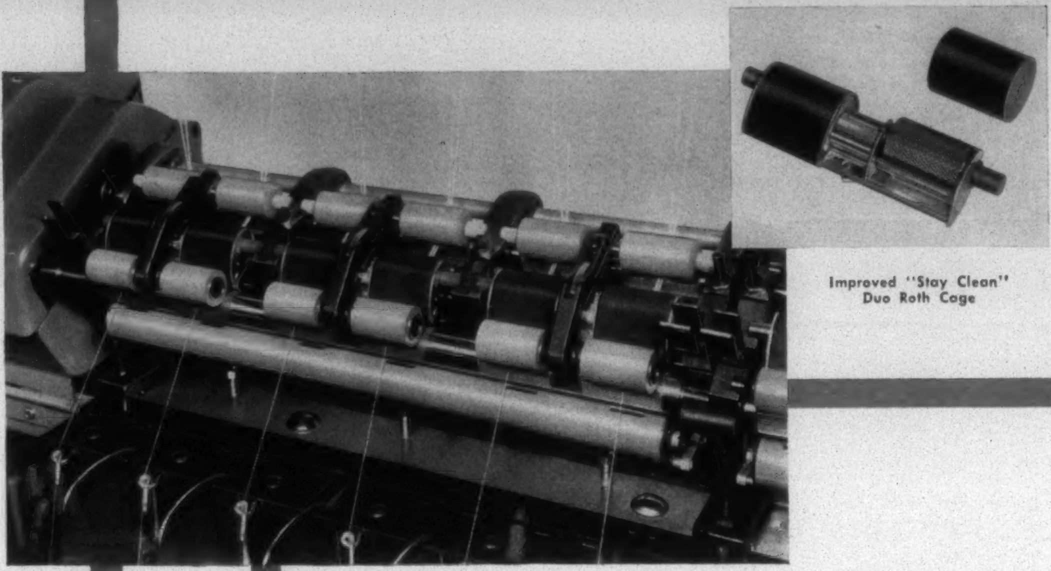
J. P. Stevens has recently equipped over 300 frames with Dixon Saddle Guides. The installation was based on reduced operating costs, improved yarn quality, low first cost, and easy installation.

Dixon Saddle Guides entirely eliminate oiling and yarn wrapping — and greatly reduce cleaning, yarn soiling, picking, and other spoilage. These savings and advantages, plus a great reduction in drafting power consumption, make Dixon Saddles pay for themselves quickly — frequently in under two years.

First cost is remarkable — as low as $1.20 per spindle. Installation is simple, easy, and low in cost.

Already proved on over 300,000 spindles. Write immediately for further information.

DIXON CORPORATION
BRISTOL RHODE ISLAND
Southern Sales: R. E. L. Holt, Jr., and Associates Inc., Box 1319, Greensboro, N. C.
Northern Sales: William R. Fox, P. O. Box 380, Providence, R. I.



Improved "Stay Clean"
Duo Roth Cage

5 Good reasons why

"STAY CLEAN"* DUO ROTH

by SACO-LOWELL

WILL BETTER YOUR QUALITY,
INCREASE PRODUCTION AND REDUCE YOUR COSTS.

OVER 1,400,000 SPINDLES OF REGULAR & STAY CLEAN NOW IN USE.

1. Of great importance is the ability to operate with drafts increased from 50 to 100% over conventional systems, and to do this without any reduction in the effectiveness of the fiber control. This maintenance of fiber control is reflected in a more uniform, stronger, and improved quality yarn from a given stock and with less ends down.
2. StayClean characteristics enable you to extend the cleaning cycle in some cases as much as 100% because there are no cap bars to get dirty and there is a minimum of clearer waste with a given draft.
3. The ruggedness of design and simplicity of construction, together with the use of anti-friction bearings, keeps maintenance at a very low figure.
4. All of these characteristics combine into a simple, easy to operate system, facilitating the attainment of quality and strength improvements from your present stock.
5. In practically every installation of "Stay Clean" Duo Roth there is an important reduction in the "ends down" per thousand spindle hours, thus reducing reworkable waste and increasing the overall operating efficiency of the spinning frame.

For further information, or a demonstration, contact the nearest Saco-Lowell Sales Office.

*Trademark

SACO-LOWELL
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Shops at BIDDEFORD and SACO, MAINE; and SANFORD, N. C.
SALES OFFICES: CHARLOTTE • GREENSBORO • GREENVILLE • ATLANTA

WAN

A DEFINITION FOR

BIG BUSINESS—BIG PROBLEM

Wash & wear is one of the biggest, most promotable ideas ever to hit the industry. There's big money in it for the manufacturer and for the retailer. There are big advantages for the consumer. And there's a big problem we have yet to solve: wash & wear needs a definition. A definition we can agree on and live by.

THE COST OF CONFUSION IS HIGH

The lack of uniform standards for wash & wear garments has created costly problems for every level of the industry. Even salespeople (especially retail) are confused. Too often, the consumer buys merchandise in good faith only to discover she's been misled into expecting performance the garment can't possibly deliver. That kind of thing costs time, sales—and it could eventually cost the industry the faith of the buying public.

SO LET'S GET OUR CLAIMS STRAIGHT

Even where people should be "in the know"—millmen, cutters, retailers—the lack of standards has caused plenty of confusion. To gain competitive advantage, salesmen have sometimes gone overboard on claims. Where the facts aren't always clear, there has been a tendency to quote performance features they *hope* are true. These are all danger signs and the road ahead will be getting rough UNLESS AND UNTIL THE INDUSTRY REACHES SOME AGREEMENT ON A SENSIBLE DEFINITION.

THE PUBLIC IS WAY AHEAD OF US

The strangest fact of all is that the public seems far less confused about wash & wear than we in the industry. Consumers have seen the term on hundreds of thousands of hang tags, thousands of retail and national ads, on detergent powders, and in the instruction booklets they get with automatic washers.

THE CHEMSTRAND CORPORATION • GENERAL SALES OFFICES: 350 FIFTH AVE., NEW YORK 1, N. Y. • DISTRICT SALES OFFICES: 9 Rittenhouse Place,

TED

WASH & WEAR

They've had time to make up their minds about wash & wear. And they don't always believe what we want them to believe. The buying public is fast deciding to rely only on the minimum advantages of wash & wear, thereby shortchanging themselves and the industry. It's time to give our customers the full benefits of wash & wear. Time to put our claims into phrases the consumer can believe and the merchandise can live up to.

WE PROPOSE A DEFINITION

In the simplest possible language, here's what we propose wash & wear mean from now on: **A WASH AND WEAR GARMENT IS ONE THAT CAN BE WASHED BY HAND OR IN A WASHING MACHINE AT THE WARM WATER SETTING. WHEN DRIP-DRIED IT RETAINS ITS CREASE OR PLEATS, AND RECOVERS SUFFICIENTLY FROM WRINKLES TO NEED LITTLE IF ANY IRONING.** This is the definition Acrilan will be pushing in its huge advertising campaign. It's a definition that is easy to understand and possible for the industry to live with. It will clear up a lot of confusion, eliminate a lot of unnecessary waste, and infinitely strengthen the position of wash & wear in the garment field.

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®

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WEAVE ROOM LUBRICATION NEWS

BEN BOY LUBRICANT No. 55-B

Hundreds of mills have found this lubricant will do an excellent job on Ball Bearings and all grease fittings.

GEARCO "A"

A new semi-fluid lubricant for Gears and Cams. Reports from the field and repeat orders indicate that "Gearco A" is doing a fine job. It may be the answer to YOUR problem.

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White Star Spindle Oil

Non-Melting Oils

Twister Ring Lubricants

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GEORGIA-CAROLINA OIL COMPANY
Box 101 G-C Phone 2-1428
MACON GEORGIA

points out. In addition, they give maximum load capacity with minimum over-all height and longer floor life because of greater distribution of the load over the floor area.
(Request Item No. D-14)

Yale Gas-Powered Lift Truck

The Yale & Towne Mfg. Co. has announced the development of industry's first GS approved gas-powered industrial lift truck for safe use in hazardous locations. Achievement of the approval is the culmination of more than 4 years work by Yale engineering and experimental staffs. The company reports it is the first to introduce a truck which fully complies with the stringent regulations for GS approval as set down by Underwriters Laboratories. The approval covers Yale's gas-powered trucks in capacities from 3,000 to 10,000 lbs.

According to specifications and recommendations prescribed by the National Fire Protective Association, GS trucks are the only gasoline trucks which can be safely used in locations defined as hazardous because of the presence of combustible fibers or fly, lint, dust, etc. N.F.P.A. makes recommendations for the type of materials handling equipment that can be safely used in various locations whose degree of hazard has been classified in the National Electric Code. One such classification covers all textile facilities where combustible fibers are stored or handled in places other than where actual manufacture is carried on.

A number of the U.L. specifications for a GS approved truck have been features of Yale's gas truck line for years. Three years ago the company pioneered engineering efforts to develop a "spark arresting" Cyclong muffler which virtually made obsolete the old style water mufflers which were less efficient and dangerous since careless maintenance might allow them to run low on water. For many years Yale gas trucks have been equipped with a non-siphoning suction-fed fuel system which U.L. requires in a GS truck.

One of the new developments to meet GS standards is the development of a specially designed exhaust flame arrester made up of 64 finely separated stainless steel plates. Yale's new truck also has a generator and battery cutout switch easily accessible to the operator so that the full electrical circuit can be broken in case of emergency.
(Request Item No. D-15)

Belt Conveyor Accessory

A new Rapistan telescoping bridge to be used between adjacent power and gravity conveyors that are lagged to the floor has been introduced by The Rapids-Standard Co. Inc. The purpose of the telescoping bridge is to allow for a maximum 6" of take-up on the belt pulley of the power unit without necessitating the removal and re-installation of the connecting gravity conveyor. Rapid wheels are used in the bridge. The bridge, which is available in 12", 18" and 24" widths, may also be used between 2 power conveyors. (Request Item No. D-16)

The Textile Shops

Acid Tanks
Ball Bearing Journal Assemblies for Slashers and Dry Cans
Bleaching Tanks and Tubs
Card Screens
  Repaired, New
Card Screen Bars and Ribs
Card Screen Lickerins for Cotton and Rayon
Chemical Tanks
Condensers
Condenser Screens
Conveyors
  Pipes and Returns
Coppersmithing
Cowl Ventilators
Cylinders
  Spinning
  Spooling
  Twisting
Drip Pans
Dye Kettles and Vats (New)
Dry Cans
  New and Repairs
Driers
Filters
Misc. Sheet Metal Work
Picker Screens
  Perforated Metal
  English Wire Cloth
  Galvanized Wire
Pneumatic Conveying Systems
Quill Cans
Rolls of All Types and Sizes
Size Kettles
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Vee Belt Drives for Dry Cans
Waste Screens
Special Machines
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USE **the attached cards for a prompt reply to your requests — no postage required.**

For the Mill Bookshelf

Plant Lighting Data

Publication of the new 1956 edition of the RLM standard specifications for industrial lighting units has been announced by the RLM Standards Institute. The new edition contains important revisions in specifications on both incandescent and fluorescent industrial lighting units, as well as new lighting data of special value to specifiers. Copies of the new book are available without cost or obligation to lighting maintenance men, purchasing agents and others concerned with the buying, selling or specifying of lighting units.

Most important of the changes and additions to be found in the 1956 specifications book are the new coefficient of utilization tables for 8 different incandescent and fluorescent lighting units. Calculations are based on the latest zonal method of computing coefficients of utilization and illumination on room surfaces. Also included are newly-revised light distribution curves on RLM direct and semi-direct fluorescent lighting units. These are the popularly-called Upward Light units which direct from 8% to 30% of the light toward the ceiling. Candlepower distribution curves are plotted at normal, parallel and 45°. In addition to these revisions, the book has been brought up-to-date in line with the latest approved revisions for RLM standard specifications, as established by the RLM Standards Institute.

(Request Item No. D-17)

PneumaClear

Pneumafil Corp. has published a 4-page, illustrated bulletin describing its new PneumaClear for the Warner & Swasey Pin Drafter. The bulletin points out that PneumaClear automatically and continuously clears fly, sheddings, dirt and trash from the high-speed 3-roll drafting unit of the Warner & Swasey Pin Drafter. The PneumaClear works in this way. In clearing, the contact of the clearer apron and pads automatically clears fly, sheddings, dirt and trash from the top pressure roll, the fluted inner nip roll and the fluted outer nip roll. A gentle air vacuum suction continuously plucks the cleared waste from the clearer apron and pads and quickly conveys it to the collector unit. The design permits efficient waste removal without robbing stock. The waste is retained in the collector unit where it can be removed when convenient.

Advantages of the PneumaClear cited by the bulletin include improvement in quality, reduction in down time, decrease in operator loads and simplification of the running of difficult fibers. PneumaClear is available for any model Pin Drafter, whether single or double head, the literature points out. It is mounted on and within the Pin Drafter chassis and uses no additional floor space. Additional construction and operating data is also included. (Request Item No. D-18)

Rubber-Covered Squeeze Rolls

Rodney Hunt Machine Co. has announced the release of its latest industrial engineering report (No. 9) entitled *Effect of Linear Pressure on Rubber-Covered Squeeze Rolls.* The report is intended to assist in the design, selection and use of rolls for specific applications. Discussing the degree to which high pressures decrease roll life, the report provides data on the relationship between softness of the rubber covering, nip width and unit pressure at the center of the nip. Included is a graph which correlates various linear inch pressures with nip width and unit pressure at the nip for hard and soft rubber-covered rolls. Another graph illustrates how the configuration of materials passing through the nip effects roll life.

(Request Item No. D-19)

G-E Heaters And Heating Devices

General Electric Co. is offering a new 60-page bulletin (GEC-1005G) describing the company's electric heaters and heating devices. The bulletin contains application index, calculating data, specifications, operating information and list prices of standard G-E heating equipment. Process and application index shows methods of heating and type of heater recommended for various heating purposes.

(Request Item No. D-20)

Positrol Slasher

Saco-Lowell Shops has published a 16-page illustrated booklet describing its new Positrol slasher. The publication cites construction features of the unit, using a number of sketches to compare the Positrol with conventional slashers. Fourteen advantages are cited for the new unit. They include positive control of tension into vat from creel; positive control of size application; positive control of drying air currents; positive control of humidity in dryer; positive control of tension in dryer; positive control of tension to loom beam; positive control of moisture in delivered warp; positive control of size temperature; positive control of size level; positive control of temperature of air in each pass; positive control of beam press roll loading; positive control of agitation in size vat; positive control of humidity in exhausted air. Floor space requirements are detailed in a floor plan and elevation sketch.

(Request Item No. D-21)

Ultraviolet Light Absorbers

Antara Chemicals, a sales division of General Aniline & Film Corp., has published a new 20-page booklet describing its ultraviolet light absorbers, Uvinuls. The booklet gives information on its established products, Uvinul 400 and 490, and discusses 2 new ones, Uvinul D-49 and M-40. Ultraviolet radiation causes the deterioration of many natural and synthetic products in everyday use. The Uvinuls provide means of controlling the harmful effects of radiations within the ultraviolet range. Uvinul 400 is a light-colored powder recommended for applications where a minimum of color is required in the product in final form. Uvinul 490 is recommended wherever its slight yellow cast can be tolerated. Uvinul D-49 is similar to Uvinul 490 in absorption and color characteristics but is more economical to use, is more soluble in hydrocarbon solvents and less soluble in alcohols. Uvinul M-40 is similar to Uvinul 400 in its absorption and color characteristics but differs in its solvent solubilities.

(Request Item No. D-22)

Overhead Trolley Conveyors

A new 4-page illustrated bulletin (Form R-K 56) showing features and uses of Rapistan-Keystone overhead trolley conveyors has been published by Rapistan-Keystone Inc. Illustrated and described in the new bulletin are the many uses of this low-cost conveyor system including its application to transportation, processing, storage, assembly and other phases of production and warehousing. The bulletin has details on how versatile overhead trolley conveyor systems, assembled from standard components, fit a wide range of plant layouts and production requirements. Also included in the bulletin is information on the new hand-pushed monorail conveyor designed for use in narrow aisles or where manufacturing or packing delays prevent the use of a constantly moving chain conveyor.

(Request Item No. D-23)

General Dyestuff Circular

General Dyestuff Co., a division of General Aniline & Film Corp., announces the release of a new circular describing Indanthrene Dark Brown MR Infra Paste. The product is a new anthraquinone vat dyestuff developed for dyeing deep, economical reddish-brown shades of very good to excellent fastness properties on cotton and rayon. The circular points out that although this dyestuff is especially recommended for the production of attractive cocoa to spice-brown self shades, it is very useful also as a strong and very economical brown component of fast combinations.

(Request Item No. D-24)

Bristol Instruments

A new bulletin covering the company's Dynamaster electronic potentiometer and bridge instruments for recording and controlling has been published by The Bristol Co. The 2-color bulletin is divided into 3 main sections. The first section gives details of the instrument and its components, as well as the principles of operation. Full specifications are listed for the various models of recorders and automatic controllers available. These include 3" and 12" strip-chart and 12" round-chart recorders, and both air and electric control models. Single and multiple variable recorders are listed, as well as the new high-speed recorder.

The second section lists sensing elements and special attachments, such as resistance bulbs, magnetos, photocells, conductivity cells, and frequency converters, plus computing, telemetering, totalizing and digital read out attachments. The third section describes and illustrates other equipment in which Dynamasters have been incorporated. The 64-page bulletin, P1245A, is illustrated with more than 110 photos and drawings.

(Request Item No. D-25)

Controlled Volume Pumping

The Milton Roy Co. is offering a technical paper describing metering pump accuracy tests. The text and illustrations of a recent talk before the Instrument Society of America on factors governing accuracy in controlled volume pumping are presented in the bound technical paper. Test procedures and results of how separate investigations into metering accuracy are recorded. The paper describes how controlled volume pumps, because of their high volumetric efficiency and accuracy, are used as flow control instruments in both open and closed loop instrumentation systems. Typical systems are illustrated, including those showing the use of controlled volume pumps as flow controllers, ratio controllers and final control elements. (Request Item No. D-26)

Dispersion Of Pigments

Manton-Gaulin Mfg. Co. is offering a new 4-page folder describing the Gaulin Sub-Micron Disperser. Designated the S-M-D, this new machine is presented as having 9 special features where its exceptional high velocity sheer will improve product quality and reduce production costs. Construction and operation of the Sub-Micron Disperser are covered, along with specifications and a detailed description of how the S-M-D is applied to all types of pigment dispersions. The special Gaulin dispersion valve, which is a feature of the S-M-D, is shown in cut-away view and its operation is described in detail.

(Request Item No. D-27)

Lowell Tech Bulletin

A new technical bulletin, *The Effect of Certain Physical Characteristics of Fabrics Upon Heat Transmission*, has been issued by the Lowell Technological Institute. The bulletin was prepared and written by David L. Aelion, graduate student of L.T.I. in 1952-53, and Prof. Harry C. Brown, chairman of the institute's division of engineering. Free copies can be obtained by writing to the institute at 1 Textile Ave., Lowell, Mass., or by using this journal's reader service request card.

(Request Item No. D-28)

Wire-Reinforced Rubber Pipe

SoundZorber, a wire-reinforced rubber pipe for eliminating noise and vibration from water lines, is described in a catalog (SZ-55) issued by T. R. Finn & Co. Inc., specialist in shock and vibration control. Sizes available range from 1/2" i.d. to 12". The catalog gives detailed descriptions of the pipe construction. These include the smooth inner lining of high-tension abrasion-resisting rubber, the pipe walls of rubber impregnated wire-reinforced fabric imbedded in rubber for their full length, and outer wall coverings of abrasion, sun and weather-resisting rubber. Small pipes are equipped with male iron pipe thread fittings. Large sizes have integral full-faced rubber flanges backed with either 150 or 300-lb. drilling steel flanges also imbedded in rubber. Operating characteristics are described and temperature ranges to plus 180°F. for cold water, brine and hot water lines. Pressure range is up to 250 p.s.i. Illustrations of typical installations, noise, vibration and water hammer control, dimensions and comparisons of acoustical impedance are also described. (Request Item No. D-29)

Rapistan Casters

A new 4-page condensed catalog showing the full line of Rapistan casters is now available from The Rapids-Standard Co. Inc. Exclusive features of steel forged, cold forged and stamped steel in classifications from light (150 lbs.) to heavy (3,000 lbs.) duty are described, and recommended uses for each of the series are listed. Also illustrated and described are 8 types of wheels with a wide range of performance characteristics for almost any type application.

(Request Item No. D-30)

Using Activated Silica

Wallace & Tiernan Inc. is offering literature giving technical data and describing

to get Cottons that are CRUSH-PROOF SHRINK-PROOF of Permanent Crisp Hand

use PENFORD FINISHING GUMS with Insolubilizing Resins

Good permanent finishes on cotton sport denims, shirting materials, and dress goods that withstand standard washing tests are now made possible with the combination of Penford Finishing Gums and urea-formaldehyde or melamine resins. Of the different grades of Penford Finishing Gums there is one best suited to your process.

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Get twice the continuous running time . . . cut your creeling time in half . . . install Gossett's NEW BIG drawing coilers on your present drawing frames NOW!

We convert 10" and 12" drawing coilers to 14" through 15" in diameter and 36" to 42" in height.

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N. C.-Va. Representative

GOSSETT Machine Works, Inc.
GASTONIA, NORTH CAROLINA

the operation of its WT Silactor, a unit for the continuous preparation and application of activated silica for use in processes where activated silica can serve as a coagulant aid to improve flocculation or sedimentation. Since the unit uses chlorine as the activant, it is particularly suited to processes where chlorine is used for sterilization or slime control in addition to using activated silica for improved coagulation, the company points out. The method uses both sodium silicate and chlorine directly from their original shipping containers, eliminating the need for intermediate handling, extra storage tanks for materials and large batch-type equipment. The unit is described as compact and easy to install.

(Request Item No. D-31)

Laboratory Homogenizer

The Gaulin Laboratory Homogenizer, specially-designed for research, pilot plant or limited production operations is covered in a new 4-page folder (LH-55) released by the Manton-Gaulin Mfg. Co. Starting with a brief "Theory of Homogenization," the literature describes the operation of the laboratory-sized unit, covers representative types of products which can be processed and gives details on the special Gaulin homogenizing valve. Cross-section views show the Gaulin single-stage and 2-stage homogenizing valves. Specifications and dimensions of the machine are also included, and an invitation is extended to use the laboratory facilities and research department of Manton-Gaulin for analyzing processing requirements. (Request Item No. D-32)

Ritsky Let-Off Motion

Steel Heddle Mfg. Co. is offering a 4-page bulletin describing its Stehedco Ritsky let-off motion. The device is said to be a new and revolutionary development, allowing for better weaving by constant, positive warp tension control. It assures perfect warp tension control in impossible places, the bulletin states. It eliminates large bulky weights hanging from each warp beam and obstructing aisles. The let-off motions are manufactured for brake drums with circumferences between 31½" and 50" and not less than 1½" wide flat on the drum.

(Request Item No. D-33)

Wash-And-Wear Cottons

Rohm & Haas Co. is offering reprints of an article on "Fabrics for Easier Living" which appeared in the Sept.-Oct. 1955 issue of *Rohm & Haas Reporter*. The 8-page article describes the processing of cottons with Rhonite R-1 for wash-and-wear use. Rhonite R-1 is a modified urea-formaldehyde compound which has long been used by finishers in the production of dimensionally-stable, crush-resistant fabrics. A modification of the technique has now made possible the manufacture of wash-and-wear cottons, the folder points out. Illustrated are a number of fabrics treated with the process.

(Request Item No. D-34)

Fiber Microtome

Mico Instrument Co. is offering a 4-page, illustrated bulletin describing the company's fiber Microtome. According to the literature, the Microtome makes possible rapid preparation of very thin sections for the study of fibers, threads and yarns for laboratory analysis where speed and accuracy are of importance. It is widely used to identify fiber content in mixtures of yarn, Mico reports. The instrument is available in 2 models. Cat. No. 200 is designed for fibrous material and is engineered with a .031" aperture. Cat. No. 201 is designed for flat material and is furnished with an aperture .125" long by .015" wide. Prices are included in the bulletin.

(Request Item No. D-35)

Haskell-Dawes Twisters

Haskell-Dawes Machine Co. Inc. has released 3 new fact folders describing the company's H-D 12-spindle twister; the H-D 14-spindle twister; and the H-D 2-head twister-former. The literature points out and illustrates construction features of the 3 units, listing their variety of applications, operating techniques and productive capacities. Both the 12 and 14-head twisters are available in 2 distinct models—wet precision

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twister and the dry twister. The 12-spindle unit is available in 3 take-up sizes, 5x7, 5x8 and 5x9. The 14-spindle unit offers the further advantage of a 6½" x 8" (5½-lb.) spool as compared to the 5" x 7" (2½-lb.) spool offered by the 12-spindle machine. Normal floor space requirements are listed.
(Request Item No. D-36)

Arnel Finishing Data

A new technical bulletin (TD-15) which provides information on dyeing, printing, finishing and heat treating Arnel fabrics and blends containing the Celanese triacetate fiber is now available from the textile division of the Celanese Corp. of America. Through text, charts and diagrams, the bulletin presents this technical information on the new Celanese fiber. Arnel, the bulletin notes, not only possesses the beauty characteristics of Celanese acetate, but also incorporates certain unique performance qualities depending on how it is woven or blended. Through heat treating, for example, it is made resistant to stretching, shrinking and wrinkles, even in humid weather.
(Request Item No. D-37)

G-E Service Entrance Equipment

A new 36-page catalog of electrical service entrance equipment has been announced by General Electric Co. Known as the *1956 Quick Guide* and designated TCD-17, the new publication contains complete pricing information and detailed descriptions of General Electric's service entrance devices including circuit breaker load centers, all-in-1 meter socket—load center combinations, fuse puller switches, residence fuse panels, meter service entrance switches and both standard duty and general use safety switches.
(Request Item No. D-38)

Klip-Bilt Shelving

Klip-Bilt boltless steel shelving is the subject of a new 12-page illustrated color catalog (No. 706) released by The Frick-Gallagher Mfg. Co. The catalog contains a comprehensive discussion of the Klip-Bilt principle, showing how the shelving may be erected quickly and easily, as well as a detailed survey of the various models of open, closed and ledge-type shelving available.
(Request Item No. D-39)

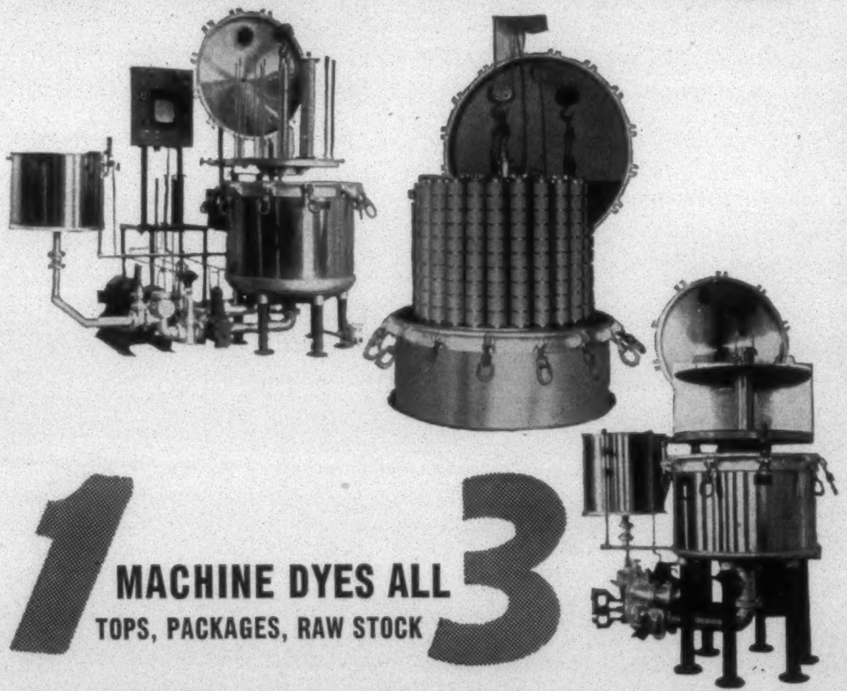
A.S.T.M. Book of Standards

(Published in seven parts by the American Society for Testing Materials, 1916 Race St., Philadelphia 3, Pa.; Part 7 on textile and other materials contains 1,692 pages with 354 standards; Price $11)

The American Society for Testing Materials has completed and published its largest triennial book of A.S.T.M. standards. The 1955 edition, published in 7 parts, has more than 2,150 standard specifications, tests and definitions for materials. Textile materials, including cotton, wool, glass fabrics, hosiery stretch yarn and testing, are covered in Part 7, which contains 354 standards, 166 of which are new or have been revised since 1952. The complete set—all 7 parts—is priced at $84.

1956 A.C.I.L. Directory

The 1956 edition of the Directory of the American Council of Independent Laboratories is now available. In addition to scope sheets for 67 member laboratories which provide details of facilities and services, the new edition includes an extensive index of services and facilities, which lists over 400 categories of services. Each category lists through code numbers the member laboratories specializing in each field as well as those qualified but not specializing. Some categories such as inorganic chemistry show that 47 member laboratories do research, testing or inspection in this field while only 11 members work in the field of radioactive chemistry. A geographical listing of members is included in the new edition. The index of services and facilities also includes a code letter with each laboratory listing showing which laboratories performing specific functions are located in the 4 geographical areas of the country. Copies of the directory may be obtained from H. M. Dudley, executive secretary, American Council of Independent Laboratories Inc., 4302 East-West Highway, Washington 14, D. C.



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Saco-Lowell Subsidiary Acquires Victor Ring

E. R. Jerome

Saco-Lowell Shops has announced that its wholly-owned subsidiary, Pawtucket Spinning Ring Co., has purchased Victor Ring Traveler Co. of Providence, R. I. Victor will continue to operate under the direction of E. R. Jerome, president and general manager. Victor travelers are manufactured in a modern well-equipped plant in Providence, and sales for Southern mills are handled from Gastonia, N. C. According to Malcolm D. Shaffner, Saco-Lowell president, the acquisition was made to permit the three companies to co-ordinate research and development in seeking ways to better spinning.

NATIONAL RING TRAVELER CO.

NATIONAL RING TRAVELER CO. opened its new office and warehouse at Gaffney, S. C., on April 2. The new building, of fireproof and modern design, is located on U. S. Highway 29 bypassing Gaffney, 12 miles from the North Carolina state line. The building includes 6,900 sq. ft. of floor space and is approximately 1,300 sq. ft. larger than the warehouse at Charlotte, N. C., which it replaces. With the additional space, the company plans to carry even more complete stocks so that customers will have the best possible service. L. Everett Taylor, Southern manager, is in charge of the new office, assisted by Jesse B. Childers. The new facility will be headquarters for all the company's Southern sales engineers.

Warner & Swasey Abolishes Twister Winder Royalties

Abolishment of the royalty agreement formerly required between the purchaser of the Warner & Swasey Whirlwind twister winder and the Deering Milliken Research Trust, Pendleton, S. C., has been announced by E. R. Gardner, sales manager, textile division, The Warner & Swasey Co., Cleveland, Ohio. "In the past," stated Mr. Gardner, "the purchaser was required to pay a royalty to Deering Milliken based upon the poundage processed over the winder. Now, this or any other royalty agreements have been eliminated, and the original purchase price of the machine covers all costs, including initial setup and demonstration." The Whirlwind twister winder is a 2-spindle machine designed to perform uniform twisting and precision winding of heavy cords as a single composite operation. The machine can ply from 2 to 120 ends or higher of synthetics, cotton, wool, jute, sisal, glass yarns, etc. Size of the finished cord may range from 2,000 to 50,000 denier or the equivalent.

Courtaulds To Build Lab And Pilot Plant At Mobile

Courtaulds (Alabama) Inc., producer of Coloray, solution-dyed rayon staple fiber, and white rayon staple, will shortly begin construction of a textile research and development laboratory and pilot plant at the company's plant site at Mobile, Ala. According to Charles L. Paine, president, the new construction, which will cost about one million dollars, is to include an extensive spinning and weaving pilot plant, one of the functions of which will be to assist Courtaulds' customers by creating new uses for the company's fibers, as well as the development of new fabrics employing Coloray and Courtaulds' white rayon, and blends of these fibers with other fibers, both natural and synthetic. The building will also include facilities for color blending, study of fiber, yarn and fabric properties, and dyeing and finishing.

Mr. Paine stated that the staff of the new organization will have a wide background

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in all phases of the textile industry, and the knowledge gained in pursuing the company's objectives will be at the disposal of Courtaulds' customers in helping to solve the many problems which occur in the translation of fibers to finished fabric. It was stated that the establishment of this new division was in line with Courtaulds' long-established policy of continuously working on the improvement of textile fibers and the development of new uses for fibers. The new department is expected to be in operation before the end of this year.

Comer-Hamilton Machinery Corp. Formed In Charlotte

James R. Scoggins

Comer-Hamilton Machinery Corp. has been organized at Charlotte, N. C., by Ben Comer Jr., president of Comer Machinery Co., Atlanta, Ga., and Don Hamilton, president of Cotton Mill Machinery Co., Charlotte. The firm will deal in machinery and equipment for the dyeing and finishing industry. James R. Scoggins has been named general manager of the new company. He was formerly on the sales staff of Barnhardt Bros. Co. Prior to that he spent 8 years with the decorative fabrics divisions of Burlington Mills. A graduate of the N. C. State College School of Textiles, Mr. Scoggins will make his headquarters in Charlotte.

National Aniline To Expand Buffalo Research Facilities

National Aniline Division, Allied Chemical & Dye Corp., has announced plans for erection of an addition to its research-engineering center located at the Buffalo, N. Y., plant. The new building will provide increased space for application research on diisocyanates which are being produced by National Aniline for sale under the tradename Nacconates. The division points out that expansion of research on commercial applications for diisocyanates is necessary to provide the best information to the company's customers with respect to new and better uses for these important compounds.

The company's new plant for producing the Nacconates is now nearing completion in Moundsville, W. Va. This will provide large-scale facilities for production of the diisocyanates. The new addition at the Buffalo plant will be a 1-story structure providing approximately 10,000 sq. ft. of floor space. It is expected to be ready for occupancy by late 1956.

Clinton Foods Plans Large Research Lab

Clinton Foods Inc. has started construction on a 2-story research laboratory at its Clinton, Iowa, plant. The announcement was made by President Roscoe C. Wagner who said the new $750,000 building would allow Clinton to consolidate many of its technical services and research laboratories

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into one center and also allow for considerable expansion of these facilities. The building will be completed sometime in December and should be ready for use by the Spring of 1957 after equipment has been installed. Half of the first floor will be used for technical sales service offices and laboratories. The remainder of the first floor will be occupied by research laboratories and pilot plant facilities, and the second floor will be devoted entirely to research.

Import-Export Firm Formed In Charlotte

A new corporation has been formed at Charlotte, N. C., to handle importing and exporting of textile machinery and supplies. The new firm, Watdes Corp., is presently located at 301½ W. Fourth St. Headquarters after June 1 will be at 218 W. Fourth St. Officers of the company are S. P. V. Desmond, president; C. E. Watson, vice-president; J. A. Olwell, secretary and treasurer; and Mrs. Hazel H. Hunter, assistant secretary.

Draper Plans To Expand Spartanburg Warehouse

To bring warehouse capacity in line with recently increased foundry and machine shop facilities, Draper Corp. will add 20,000 sq. ft. to its warehouse at Spartanburg, S. C. The new addition will be a 1-story brick and steel structure, designed to increase storage space and to allow for the installation of a conveyor system to expedite shipping of loom parts, change-overs and new attachments. This new addition, to cost in excess of $100,000, represents the fifth major expansion of Draper facilities in the South in the last 5 years, all of which are designed to improve service to customers. The contract for the building has been let to Fiske Carter & Co.

Moreland Chemical To Open Warehouse In Charlotte

Moreland Chemical Co. of Spartanburg, S. C., has established its first North Carolina warehouse for textile chemicals at Charlotte, N. C. The firm has applied for a North Carolina charter with an authorized capital stock of $100,000.

New $75,000 Machine Shop Opened In Anderson, S. C.

Large scale production of textile machine parts was begun the first of the month in Anderson, S. C., by a new firm, Machine Parts Corp. The company, which has its shop on Shockley Ferry Rd. in Anderson, will turn out spur, bevel and helical gears, loom motor pinions, ball bearing units, sprockets and chain drives, card flat screws and automatic screw machine operations, hardened and ground steel studs, lifter rods and bushings and textile machinery replacement parts. Officers of the new firm include Henry Dixon, president; Tom Kessler, vice-president and sales manager; C. G. Seabrook, treasurer; and Charles G. Seabrook Jr., secretary and assistant treasurer. Sales will be promoted primarily through distributors. Seabrook Transmission Co. of Anderson is the current distributor, but other distributors are being lined up.

Crompton & Knowles Changes Company Name

Stockholders at the 59th annual meeting of Crompton & Knowles Loom Works, Worcester, Mass., last month voted to change the corporation name to Crompton & Knowles Corp. The old name, it was pointed out, gave the wrong impression of the firm since it is no longer only a loom works.

Standard Mill Supply Co. Now Under New Management

LeRoy F. Ott, president of Standard Mill Supply Co. of Pawtucket, R. I., since 1932, has announced his retirement as president and sale of his controlling interest in the firm. William H. Streit, vice-president since 1951, has purchased Mr. Ott's interest and will head the firm as president. Standard Mill Supply was founded in 1896. The company deals in textile machinery, mill supplies and equipment and in used and

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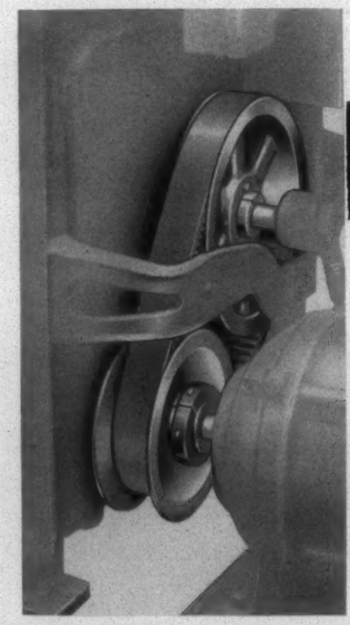
reconditioned textile winding machinery. Mr. Streit announced that there would be no changes in personnel. Harold B. Cameron will become vice-president in charge of sales and Alfred F. Dewing will continue as secretary and treasurer.

Emery Industries Re-Aligns Chemical Sales Department

Emery Industries Inc. of Cincinnati, Ohio, has announced the formation of 2 new sales departments to replace the company's present single chemical sales operation. According to K. K. Boyd, vice-president of sales and purchases, the new line-up is part of Emery's multi-million dollar expansion in research and plant facilities. It will bring related product lines into closer alignment and make possible better technical sales attention for new products as well as products now being offered. Robert F. Brown, sales manager of the present chemical sales department, will head one of the new sections, called the organic chemical sales department. This group will handle the sales of all non-fatty Emery products. G. William Boyd, sales manager of the firm's Sanitone division, has been named sales manager of the new fatty acid sales department.

Monsanto Chemical Doubles Cylic Urea Resin Output

Monsanto Chemical Co. reports that it has more than doubled its capacity to produce cyclic urea resins for textile finishing with the completion of new production facilities now operating at the firm's plant at Everett, Mass. Offered to the textile industry under Monsanto's Resloom E-50 trade-mark by the company's plastics division, cyclic urea is used extensively to produce crush resistance, dimensional stability and durable textured effects in cotton, rayon and synthetic fabrics. S. F. Sylvester, sales manager for Monsanto's textile resins, said that the additional capacity was needed primarily to keep pace with the swelling demand for cyclic urea by manufacturers of new resin-treated cottons. "Because it is easy to launder and relatively inexpensive, cotton has been the biggest selling fabric year after year," Mr. Sylvester said. "Only an inherent lack of crush resistance has kept cotton from capturing even bigger markets. Now, with the help of synthetic resins, especially cyclic ureas, this failing has been corrected and cotton ranks as one of the most popular wash-and-wear fabrics."



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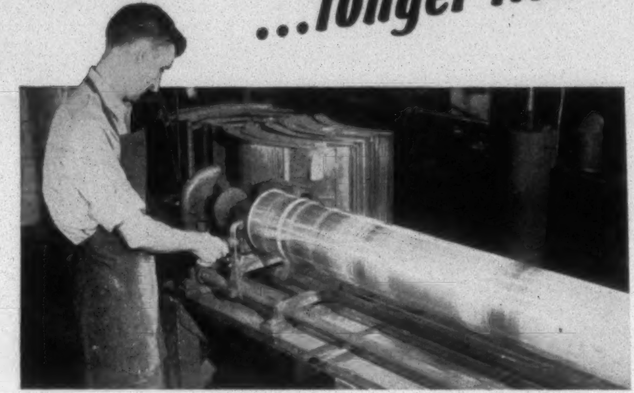

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Vol. 82 April 1956 No. 4

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State Tariff Reports - Further Evidence

About a year ago, when the danger of imports of cotton textiles from Japan and other low-wage countries to the American textile industry became more and more acute, Governor Luther H. Hodges of North Carolina appointed a commission to make a study of the possible effect of these imports on the textile industry of North Carolina and the thousands of people employed in mills of the state. On this commission were the state's Commissioner of Agriculture, the Commissioner of Labor and the director of the North Carolina Department of Conservation and Development. These gentlemen and the agencies they head made an extensive study of the situation, and have just reported the results of their findings.

Summing up, they report: "The contention that 1955 tariff reductions on Japanese cotton textile products constitute a serious threat to North Carolina's textile industry, as well as many other segments of our economy, appears to be amply supported by the data presented in this report."

The total effect of further reductions in textile tariffs, the report points out, would be advantageous in some respects, disadvantageous in others. The principal advantage seen would be an increased market for some agricultural products, tobacco for example. The disadvantage would be the inevitable decline of the textile industry in the state. Weighing the good against the bad, the report notes that (1) the total value of all agricultural products of North Carolina is about one-third the total value of all textile products; (2) the total value of tobacco grown in the state is about one-sixth the total value of textile products; (3) the total value of tobacco exported from N. C. is about six per cent of the total value of textile products; and (4) the total amount of cotton consumed by the N. C. textile industry is about 5.5 times the cotton grown in the state, and most N. C. cotton is consumed domestically, not exported.

"It therefore follows," the report notes, "that the loss of six per cent of the state's cotton textile industry would be the equivalent of the loss of its tobacco exports; the loss of about 16 per cent of the cotton textile industry would be the equivalent of the loss of the state's entire tobacco crop; and the loss of about 32 per cent of the state's textile industry *would be the equivalent of the loss of the entire agricultural production of the state.*"

Other points brought out by the North Carolina report: (1) textile mills furnish more than half (52 per cent) of all manufacturing employment in the state, accounting for 227,800 out of a total of 440,000 jobs; (2) salaries, wages and pripietors' income from textiles accounted for between one-sixth and one-seventh of the total personal income of more than $5 billion for all North Carolinians in 1954; (3) of the total collections of the state's general fund, the textile industry in the fiscal year of 1952-53 paid directly or indirectly an estimated $25 million, or 14 per cent (the percentage was higher, of course, in more prosperous years); (4) for the same fiscal year, the industry paid 21.3 per cent of the total corporate income tax and 29.7 per cent of total franchise tax collections; (5) mill owners pay an estimated $5 million or more annually to local governments in property taxes; (6) North Carolina farmers received $82,532,000 cash for their cotton crop in the 1954-55 season—24 per cent of the total per capita cash farm income; and (7) major railroads in the state moved 849,000 tons of cotton textile products in 1954, while seven of the state's biggest truck lines report 26 per cent of their revenue from textile products.

It is interesting to note, too, that the report recognizes the fact that profit margins in the textile industry are so narrow that it wouldn't take much to upset them completely. The mortality rate in texiles is the highest in any industry for the simple reason that margins of one-eighth of a cent per yard in price often determine the difference between profit and loss.

A similar report has also been gathered in the state of South Carolnia. In that state, the Fiscal Survey Commisson, created by the South Carolina General Assembly to make an exhaustive study of the state's fiscal prospect for the next decade, has reported that the future economy of the state is under a cloud of uncertainty. Although industry has been pouring into the state, practically all of it has been in textiles and related industries. Some 72 per cent of the state's manufacturing activities and employment are concentrated in textiles and apparel, the highest concentration of any state.

This means, of course, that regardless of business conditions in the rest of the nation, there will be financial and fiscal difficulties in South Carolina whenever there is any recession in the textile industry. "There is no alternative to the conclusion that the economy of South Carolina cannot be prosperous unless the textile industry operates at full employment," the commission points out. "It must also have reasonable earnings to maintain the financial well-being of the industry. Were it not for the present threat to the price structure of textile goods that is caused by the increasing volume of imports . . ., we could reasonably expect the textile industry in S. C. to continue to move ahead and provide stable employment and add greater strength to the economy of the state. However, until there is some effective handling of the textile import situation, the future of the textile industry will remain under a cloud of uncertainty as will the entire future economy of South Carolina."

Echoing North Carolina's concern, the Cotton Manufacturers Association of Georgia and the Alabama Cotton Manufacturers Association, in special reports, point out that the sharp cuts in tariffs made last Sept. 10 would: (1) reduce textile employment considerably and add to unemployment rolls; (2) curtail production severely; (3) reduce over-all state income; (4) tend to "dry up" the economy of those counties in both states in which textile manufacturing accounts for the greater part of employment and payrolls; and (5) adversely affect a number of other businesses and industries from which the textile industry buys or to which it sells.

Approximately one out of every four persons in manufacturing employment in Alabama is engaged in textiles; in Georgia the ratio is nearly one in every 3.1 persons. As in the case of North Carolina, textiles constitute the largest manufacturing industries in Georgia and Alabama, and both states are in full agreement with the recommendations cited in the North Carolina study—that is for this country and Japan jointly and officially to set quotas for shipment to the U. S., and for Congress to limit imports to manufactured cotton products.

Despite the fact that data similar to that contained in these reports have been brought time and again to the attention of the Eisenhower Administration, little solace has

TEXTILE INDUSTRY SCHEDULE

— 1956 —

Apr. 27-28 (F-Sa)—Annual convention, **DELTA KAPPA PHI FRATERNITY**, Atlanta, Ga.

Apr. 28 (Sa)—**SOUTH CENTRAL SEC., A.A.T.C.C.**, Hotel Patten, Chattanooga, Tenn.

May 2-3 (W-Th)—Spring meeting, **THE FIBER SOCIETY**, Clemson House, Clemson, S. C.

May 2-4 (W-F)—Industrial safety conference, **NORTH CAROLINA INDUSTRIAL COMMISSION**, Charlotte (N. C.) Hotel.

May 3 (Th)—Annual meeting, **NATL. ASSN. OF WOOL MFRS.**, Waldorf-Astoria Hotel, New York City.

May 5 (Sa)—**PIEDMONT DIV., S.T.A.**, Hickory (N. C.) Hotel.

May 9-11 (W-F)—Insurance conference, **A.M.A.**, Hotel Roosevelt, New York City.

*May 10-12 (Th-Sa)—Annual outing, **CAROLINA YARN ASSN.**, The Carolina, Pinehurst, N. C.

May 12 (Sa)—**NORTHERN NORTH CAROLINA-VIRGINIA DIV., S.T.A.**, Y.M.C.A. Building, High Point, N. C.

*May 14-19 (M-Sa)—**NATIONAL COTTON WEEK** (sponsored by National Cotton Council of America).

May 23-25 (W-F)—General management conference, **AMERICAN MANAGEMENT ASSN.**, Hotel Roosevelt, New York City.

May 31-June 2 (Th-Sa)—**SOUTH CAROLINA TEXTILE MFRS. ASSN.**, The Cloister, Sea Island, Ga.

June 5-8 (Tu-F)—**MATERIALS HANDLING INSTITUTE EXPOSITION**, Cleveland (Ohio) Public Auditorium.

*June 8-9 (F-Sa)—Annual outing, **SOUTHEASTERN SEC., A.A.T.C.C.**, Radium Springs, Albany, Ga.

June 8-9 (F-Sa)—**COTTON BUYERS & CLASSERS DIV., N.C.T.M.A.**, Grove Park Inn, Asheville, N. C.

June 8-9 (F-Sa)—Annual outing, **PIEDMONT SEC., A.A.T.C.C.**, Mayview Manor, Blowing Rock, N. C.

*June 15-16 (F-Sa)—**CAROLINAS-VIRGINIA PURCHASING AGENTS ASSN.**, Grove Park Inn, Asheville, N. C.

June 17-22 (Su-F)—Annual meeting (in conjunction with apparatus exhibit), **A.S.T.M.**, Chalfonte-Haddon Hall, Atlantic City, N. J.

June 21-23 (Th-Sa)—Annual convention, **SOUTHERN TEXTILE ASSN.**, Mayview Manor and Green Park Hotel, Blowing Rock, N. C.

June 22-23 (F-Sa)—Annual outing, **SOUTH CENTRAL SEC., A.A.T.C.C.**, Lookout Mountain Hotel, Chattanooga, Tenn.

Sept. 6-7 (Th-F)—Fall meeting, **THE FIBER SOCIETY**, Warwick Hotel, New York City.

Sept. 10-15 (M-Sa)—**PERKIN CENTENNIAL** (sponsored by various professional societies and trade associations), Waldorf-Astoria Hotel, New York City.

Sept. 13-15 (Th-Sa)—National convention, **A.A.T.C.C.**, Waldorf-Astoria Hotel, New York City.

*Sept. 20-21 (Th-F)—Annual outing, **CHATTANOOGA YARN ASSN.**, Lookout Mountain Hotel, Chattanooga, Tenn.

Sept. 27-28 (Th-F)—Annual meeting, **COMBED YARN SPINNERS ASSN.**, Cavalier Hotel, Virginia Beach, Va.

Oct. 1-5 (M-F)—19th **SOUTHERN TEXTILE EXPOSITION**, Textile Hall, Greenville, S. C.

Oct. 6 (Sa)—Annual meeting, **PIEDMONT SEC., A.A.T.C.C.**, Charlotte (N. C.) Hotel.

Oct. 11-12 (Th-F)—Annual meeting, **NORTH CAROLINA TEXTILE MFRS. ASSN.**, The Carolina, Pinehurst, N. C.

Oct. 13 (Sa)—**TEXTILE OPERATING EXECUTIVES OF GEORGIA**, Hightower Textile Building, Georgia Institute of Technology, Atlanta.

Oct. 16-19 (Tu-F)—**COMMITTEE D-13 ON TEXTILES, AMERICAN SOCIETY FOR TESTING MATERIALS**, Warwick Hotel, New York City.

*Oct. 24-25 (Th-F)—Annual meeting, **CARDED YARN ASSN.**, Hotel Fort Sumter, Charleston, S. C.

Nov. 27-30 (Tu-F)—**NATIONAL CHEMICAL EXPOSITION** (under auspices of American Chemical Society), Cleveland (Ohio) Public Auditorium.

Dec. 1 (Sa)—**SOUTH CENTRAL SEC., A.A.T.C.C.**, Hotel Patten, Chattanooga, Tenn.

*Dec. 4-5 (Tu-W)—Conference, **COATED FABRICS DIV., SOCIETY OF THE PLASTICS INDUSTRY**, Hotel Commodore, New York City.

*Dec. 8 (Sa)—**SOUTHEASTERN SEC., A.A.T.C.C.**, Atlanta, Ga.

— 1957 —

Jan. 28-29 (M-Tu)—Annual meeting, **NATIONAL COTTON COUNCIL OF AMERICA**, St. Louis, Mo.

Apr. 4-6 (Th-Sa)—Annual convention, **AMERICAN COTTON MFRS. INSTITUTE**, Palm Beach Biltmore Hotel, Palm Beach, Fla.

‡Fall—National convention, **AMERICAN ASSN. OF TEXTILE CHEMISTS & COLORISTS**, Boston, Mass.

(M) Monday; (Tu) Tuesday; (W) Wednesday; (Th) Thursday; (F) Friday; (Sa) Saturday; (Su) Sunday

Listed for the first time this month.** **‡Tentative listing.** **†Changed or corrected from previous issue.

been gained from the federal government. Just this month a five-man team representing the Far Eastern Division of the Department of Commerce has been touring Japan warning Japanese manufacturers that they must improve the quality of their textile products if they are to get a bigger share of the American market!

Textile School Enrollment - Whose Problem?

One would expect textile education leaders to be worried about the continuing low enrollment in our textile schools. They are.

One would likewise expect that the industry's management might have the same concern. But there isn't enough evidence of it.

The need for college-educated personnel will become graphically evident again late this Spring when the relatively few graduates go through the process of picking and choosing between the offers now being made to them. There will not be enough to go around.

Obviously nothing can be done to alleviate the shortage of this June's graduates. The shortage originated four years ago. Something can and should be done to prevent a continuation of this shortage so that by 1960 the pressure will be eased.

The situation at present is this: the demand for textile school graduates is as great as it ever has been, but there are fewer—actually, not comparatively—to go around. Members of this year's classes have many job offers, some getting 15 or more offers. The salaries being offered them are on a competitive level with engineering neophytes. Opportunities in textiles are varied—sales, sales service, technical service, manufacturing, advertising, finishing, research and development.

With colleges experiencing record enrollments, what has happened to the textile majors? The engineering profession, for one thing, has done a lot of promotional work and has convinced high school seniors that the big opportunity of the era is in engineering; it has been glamorized. Conversely, no such promotional work has been done by the textile industry. And, in addition, you have the not-insignificant factor of textiles having acquired the reputation of a feast-and-famine industry where there is not likely to be any stability of employment.

The glamorizing of engineering has been effective in getting college freshmen to pursue mechanical, civil and electrical engineering courses. But in the South there are not sufficient jobs for these engineering graduates; they have to go elsewhere for employment in many cases. Admittedly there are plenty of engineering jobs, but not in this area. So here is an opportunity to tell the high school senior that he can follow a vocation which will keep him near home in the area's leading industry, will offer him stable employment and good chances for advancement. Even during the 1952-54 textile recession the demand for textile graduates continued unabated.

Scholarships sponsored by textile firms are available to these young men. When they get to college there is further opportunity for part-time work. At one textile school more than $65,000 is paid out annually in salaries by the research department in using the spare time of textile students and their wives.

Still, not enough high school students are entering textile

New Bahnson Collecto-Vac increases production efficiency at Aleo Manufacturing Company

Bahnson Collecto-Vac installed on frames in Spinning Room at Aleo Manufacturing Co., Rockingham, N.C.

New automatic broken-end collection unit

- helps increase spinner efficiency
- improves product quality
- simplifies plant maintenance

Here are important features of the Bahnson Collecto-Vac which make it outstanding for economy and dependable performance:

ANODIZED ALUMINUM FLUTES eliminate flute warpage and minimize static build-up.

HIGH SUCTION EFFICIENCY-Specially engineered main duct distributes maximum pressure throughout system utilizing Bahnson-designed fan for high air handling effectiveness.

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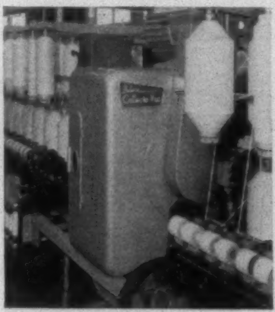

Left:
Double Collecto-Vac collection box serving two frames.

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schools in proportion to job opportunities. There has been a distinct lack of missionary work, blame for which must be accepted by both schools and industry. Some impetus needs to be given to a program of encouraging young men to study textiles. An aggressive program, begun now, will pay dividends in the years ahead.

Dividends Of Research

Chemical Progress Week this year—April 23-28—is highlighting, among other things, the close partnership of the textile and the chemical industries. The observance is of particular interest in the South—first, because the bulk of the textile industry is located in the region, and, second, because Dixie is now the area of the most rapid expansion of chemical manufacturing.

The Southern Association of Science and Industry has forecast that within the next two decades the majority of the chemical industry will be located south of the Mason and Dixon line. The reasons are not difficult to find. The South offers this industry the stimuli it needs for growth—adequate labor of the highest quality, abundant raw materials, including the products of forests and mines, water, petroleum and coal, and a swiftly-growing market within the region itself.

The backbone of the chemical industry's progress has been research—a fact of which the textile manufacturing industry would do well to take note. Research is the incubator of new and improved products and processes. Its end results for the chemical industry are linked closely with every operating division. Recently the National Science Foundation conducted a study of science and engineering in American industry. This study showed that the chemical industry spends some $350 million annually on research, of which some $38 million is allocated to basic research. This amount represents about one-fourth of the total expenditure for basic research by all industry.

Tremendous sums of money lie behind the development of a new synthetic fiber or a new plastic, for example. For instance, by the time the first pound of one of our newest man-made fibers was produced commercially, one company had invested a total of $25 million in the development and operating expense involved in the new fiber. In addition, it costs an estimated million and a half dollars to come up with a new pesticide.

But the results have been well worth the expenditures. The chemical industry is on the march. It is dynamic. Its research is opening new frontiers. It creates new activity in many other industries, making better products and more and better jobs.

Industrial technology holds the key not only to our own living standards but to the improvement of the backward areas of the world. But it can succeed, of course, only in a "climate" in which it can function. Unwise and excessive restrictions, regulations and taxation can check its march. This has occurred before, and it can occur again. But it is not yet happening in the South.

Emil Hladky of Savannah, chairman of the Chemical

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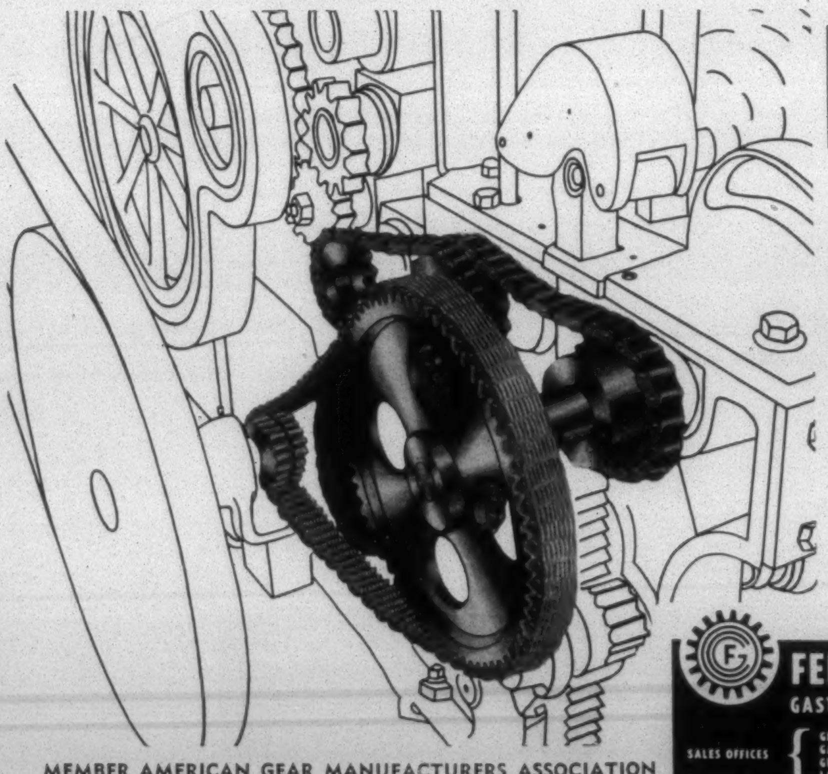

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Progress Week for Georgia, has pointed out, for example, that the chemical industry will spend an estimated $1.6 billion on new chemical construction this year and next in the United States. Investments in this construction planned, under way or completed last year or thus far this year total more than $100 million each in the states of Georgia, Louisiana, Texas and West Virginia, in the South. In addition, Mr. Hladky, who is manager of the Savannah plant of American Cyanamid Co., says further that multiple millions are being invested in the Southern states of Alabama, Florida, Kentucky, Mississippi, Tennessee and Virginia.

Labeling Laws - A Petty Approach

The "reluctant" approval by Gov. James E. Folsom of Alabama of a legislative act requiring Alabama merchants to label Japanese-made textile goods came as somewhat of a surprise in view of the furor caused by a similar bill passed last month in South Carolina. Governor Folsom, who will probably always be remembered as "Kissin' Jim," indicated right up to the time he signed the measure that he wouldn't do so. He said he viewed it as an "economic force bill," and stated that the "textile industry has created its own monster."

The South Carolina version, called the Hart-Arthur Act, calls for all merchants within the state who offer Japanese textiles and apparel made from Japanese fabrics to display a sign saying "Japanese Textiles Sold Here" on their premises. Lettering in the signs must be at least four inches high. Violation of the act is supposedly punishable by a fine of up to $100 or 30 days imprisonment.

Alabama legislators watered this down to a certain extent, requiring such signs be displayed only by retailers offering textile goods manufactured entirely in Japan and not items which may be partially Japanese-made. The penalty was also reduced to a flat maximum $25 fine.

Reactions to the first bill passed have varied. Some retailers have shipped what Japanese goods they had on hand out of the state, others have indicated they will discontinue their Japanese lines when the present stock is depleted. Few signs have gone up, especially in areas devoid of textile manufacturing facilities. As for enforcing the legislation, in all likelihood it will not be enforced, except in those places where customers demand it of the retailer.

Informal protests against the "boycott" have been made by the National Retail Dry Goods Association and the American Retail Federation, prompted for the most part by chain store operations with outlets in South Carolina. And, of course, the Japanese government has called the matter to the attention of the U. S. State Department, which has indicated it wants no part of it.

Opponents of the legislation, including the managing director of the South Carolina Chain Store Council, fear the precedent which an unchallenged foreign merchandise labeling statute could establish, they say. Carried to the ultimate, supplementary legislation could require retailers to label goods of all types and descriptions from France, Italy, Germany, Switzerland, Great Britain, etc.

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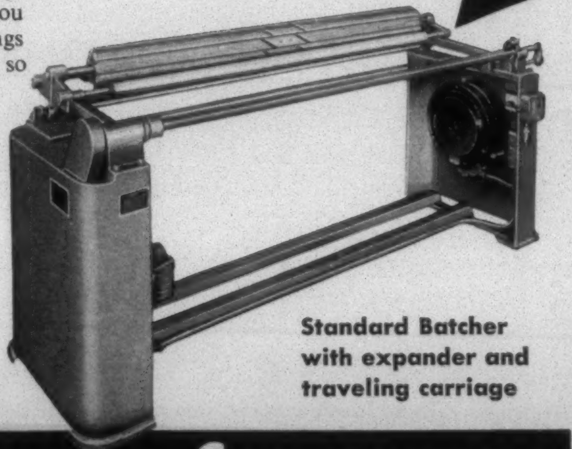

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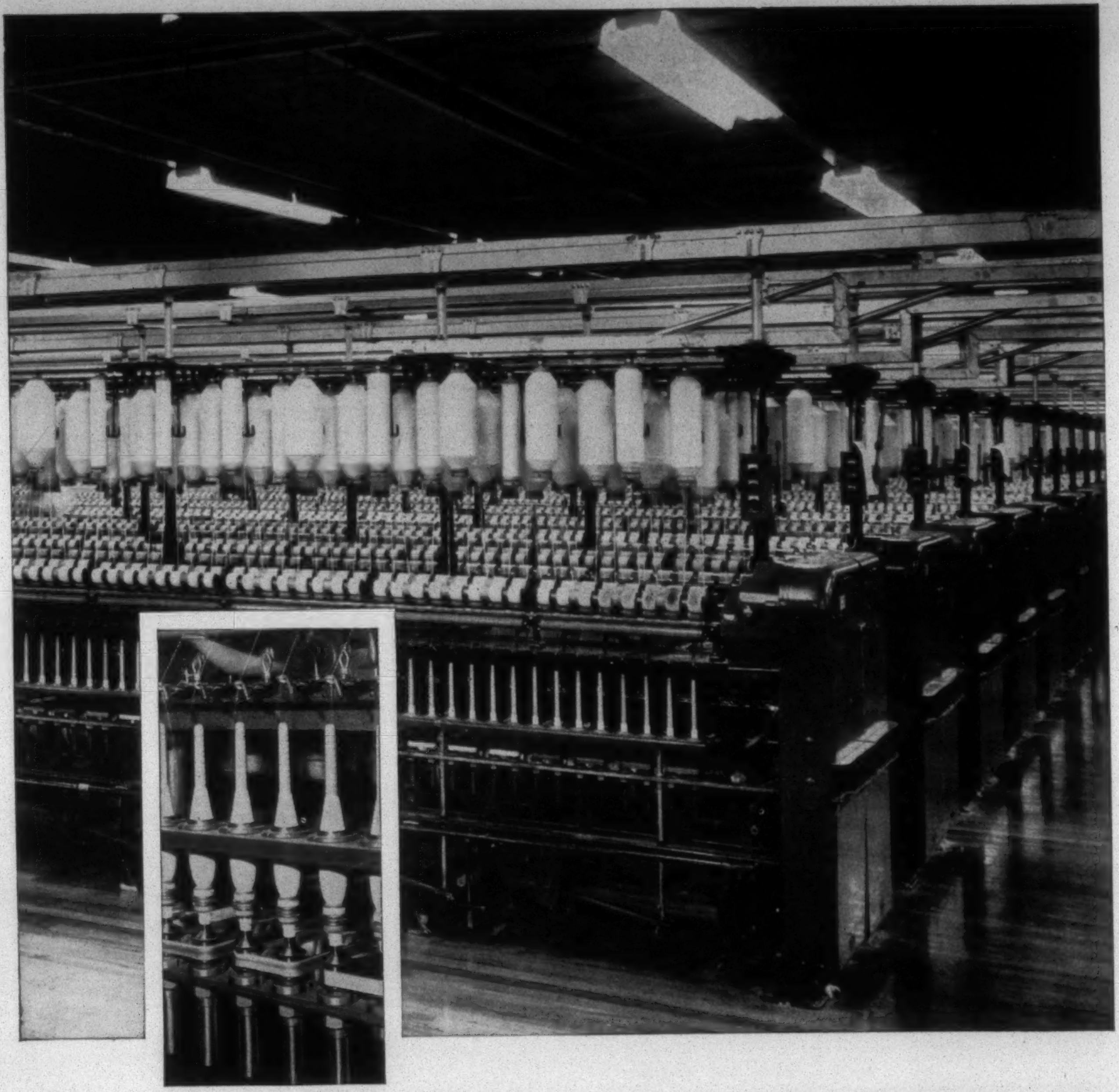

Marquette TOP DRIVE FILLING SPINDLES increase production 15% to 18%

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textile bulletin

VOL 82 APRIL 1956 NO. 4

A. C. M. I. IN CONVENTION:

Prospects reviewed . . . disappointments cited . . . policies reiterated . . . Grier succeeds Winget

THE positive opinion that unless there is relief from "the unbearable competition of low-wage nations, most of us here today will live to see the transfer of the American textile industry to Japan" was voiced by the president of the American Cotton Manufacturers Institute at the recent annual convention of A.C.M.I.

Arthur Winget

A rash statement? A. K. Winget, 1955-56 A.C.M.I. president, is not inclined to exaggeration. He is a cautious, studious veteran of the textile industry, but he was thusly outspoken in his fear of foreign competition when addressing the opening session of the convention, held April 5-7 at Hollywood Beach, Fla.

The speaker, who is chairman of the board of American & Efird Mills, Albemarle, N. C., cited inroads by Japanese textiles into the American domestic market and the repeated fruitless efforts to gain White House recognition of the acute danger to "one of our greatest industries, an industry which the Army quartermaster general once said was second only to steel in defense of our country."

Then he asked, "Must there be closed mills and breadlines before the Administration in Washington concedes the possibility of irreparable damage to the industry?"

He pointed out the issue had been coming to a head for several years and "today we are standing in the midst of the most critical period in the modern-day life of the textile industry, face to face with the life or death question of whether our government will stand idly by and permit this low-wage competition to seriously cripple" this industry.

"This critical period," he declared, "is one that was man-made for our industry, tailored by our government, and it is one we are powerless to do anything about except through government action."

Asserting that "All of us in this industry are sympathetic with the desires of the Japanese to build a sound economy for themselves," Mr. Winget stated positively that "the destruction, or partial destruction, of the American textile industry will not in itself accomplish the ends that are sought. We hope those high in government will realize that the unemployment which would result from the demoralization of this industry would bring economic chaos to a huge percentage of our population."

He posed the possibility of governmental agencies letting the industry get to the "brink of destruction" before anything is done and said this theory was "like playing with economic dynamite. Who is to say when the 11th hour has come? The velveteen industry is critically stricken now, and what remedial action has the government taken? A sort of 'death bed' petition was filed by the velveteen mills in mid-January and the Tariff Commission announced recently that hearings would begin late in June. One might ask, is this to be a hearing or an autopsy?"

The textile leader cited figures showing increasing imports of low-wage cotton cloth and garments from Japan and stated, "Our earnings record certainly does not indicate the industry can stand such unfair competition. For four consecutive years the textile industry's profit record has been one of the worst in the nation. In 1954 our industry had the lowest net earnings on sales of any industry in America."

The cotton farmer likewise is in a precarious condition, losing his foreign markets to Mexico, Brazil and other countries while trying to retain his domestic market against the rising avalanche of Japanese goods made chiefly from foreign cotton, Mr. Winget said.

Noting the recent Supreme Court decision giving the Secretary of Labor authority to make industry wage determinations on a nation-wide basis as a "locality," the speaker expressed doubt that Congress ever had any intention of giving the Secretary of Labor such sweeping power.

"I would like to re-emphasize," he said, "that in pressing this fight through the courts the textile industry was not trying to keep wages down, as figures show the average wage in the textile industry is 35 cents above the legal minimum, but was challenging the authority of a government official to make wage determinations on a nation-wide basis."

Mr. Winget paid tribute to "the hundreds of thousands of people who man the looms and spinning frames" of the textile mills as "the finest group of employees in the world. . . . The assets on our balance sheets are made up of brick, mortar and steel, of stocks and bonds and cash in depositories. But the greatest asset of all is not listed. That is the mutual respect, the genuine affection which exists between management and employees of the mills of this great industry. Our mills are built on tangible foundations, but our industry is built on people—people of courage and character and integrity."

Merchandising Textiles

A "Merchandising Textiles" presentation was made at the first session by Frank H. Leslie of Leslie & Co., New York City, who directed the showing of a motion picture, "Challenge to America," which dramatized the power of creative marketing. Qualifying and pinpointing the textile aspect was Arno H. Johnson, vice-president and director of research for J. Walter Thompson Co., New York advertising agency. Comments from Mr. Johnson:

Based on the shifts in family income that will take place in an expanding economy, plus the population growth by 1965, the potential domestic market for cotton consumption in apparel and home furnishings can be 75 per cent greater than the actual consumption in 1955.

An analysis of the detailed purchase records of families in different income groups, prewar, showed that total per capita consumption of cotton articles stepped up with each higher level of income—that consumption of cotton articles (in physical units) was 96 per cent greater in families with $3,000 to $5,000 income than in families with $1,000 to $1,500 income (this was the pre-war typical family).

With the growth in our economy possible by 1965 the typical American family will be similar to, or better than, the prewar $3,000 to $5,000 type of family in real purchasing power. This means that the potential per capita consumption would be 96 per cent greater, on the average, than prewar if families were educated to step up their standards of consumption just to the level actually prevailing in the better income groups prewar.

This could affect the cotton potential as follows:

	U. S. Civilian Per Capita Consumption In Pounds		
	1935-1939 Prewar	Present 1955	1965 Potential (At Rate Of Prewar Better Income Groups)
Cotton Fibers	22.5 lbs.	23.3 lbs.	34 *
Man-Made Fibers	2.6 lbs.	10.3 lbs.	15 *
Total Cotton & Man-Made	25.1 lbs.	33.6 lbs.	49 lbs.
			96% above prewar—or 46% above present level

*Assuming cotton can maintain its present 1955 share of market against man-made fibers.

With a potential increase of 46 per cent over present levels in per capita consumption and with an increase of approximately 20 per cent in population expected by 1965, the domestic market potential could be 75 per cent over 1955 levels for the total of cotton and man-made fibers. Assuming cotton could succeed in holding its present position against synthetics, this means a 1965 market potential for cotton 75 per cent greater than at present.

To attain this potential will require modern marketing, promotion, merchandising, and advertising since it means education of mass millions of our population to step up their appreciation and use of cotton—at least up to the same levels of consumption of the better income groups prewar.

Those who will be best equipped to profit from this changing and explosive American market are those who keep tabs on the changes and the pressures that cause the changes, and who learn through economic and marketing research how to anticipate the trends in consumer demand.

It will require going beyond static studies of present buying habits or motivation because these habits and motives are the result of past experiences built around a lifetime of training and a concept of a standard of living quite different from what now is possible.

This means increasing emphasis on "activation" research and experimentation in ways to *change* concepts and motives so that mass millions will move swiftly into the higher living standards made possible by our miraculous improvements in productivity.

The magnitude of the job to be done in changing consumer habits as well as the great opportunity for expanding sales in the textile field suggests the need for *raising our sights* in selling.

It suggests the need for reorientation of objectives and re-examination of markets and methods—not in relation to the past but in view of the new and changed opportunities.

It suggests re-examination of the sales organization and the advertising budgets—to see if they are adequate for the job to be done and for the opportunity that exists. Formulas based on past relationships of selling and advertising to sales may no longer be realistic in view of the growth of competition, expansion in the number of primary prospects, and the need for education to change habits and ideas. Just to meet the President's goal of $500 billion of production by 1965 will require an expansion of over 50 per cent in total sales of all goods and services to consumers—an almost revolutionary change in living standards and concepts of the mass of our population.

And it can mean a 75 per cent increase in the domestic market for textile products, by 1965, if this industry takes full advantage of the opportunities inherent in our dynamic and growing economy.

In summing up the matter of merchandising, Mr. Leslie said "For the past two decades, we have concentrated our best efforts on manufacturing efficiency. In this regard, we have done a superlative job. As merchants, however, we have been much less adequate than the compounders of tooth-pastes and soda-pop and deodorants.

"You may think that consumer habits and motivations are difficult to influence. Perhaps, they are not as difficult as they seem. The power of advertising promotion, with a penetrating indelicacy, created whole industries on the mere suggestion that a man may have a bad breath or a body odor or need a shave. I believe it is time we gave those "Poof" bottles a little competition by suggesting the hygienic as well as aesthetic advantages of clean shirts or a change of underwear.

"A habit of thinking—we might properly call it 'our unreconstructed reflex'—which will be most obdurant to change, is our usual slide-rule or simple arithmetic approach to problems. A question of replacing looms with newer models is a matter of balancing cost with return. It requires expert cost-accounting and engineering experience, both of which we possess in seeming abundance. But in the somewhat irrational world of merchandising, two plus two does not always equal four; it sometimes comes up seven or snake-eyes. And I do not use the gambling analogy to emphasize the risk involved—which is no greater than that of any other business enterprise that is soundly conceived and intelligently executed—but rather to indicate how remote from our habitual modes of thinking it can be.

"There is an additional difficulty which stands between us and the full realization of our potentialities which I feel

Hardman, Grier, Jones

Top member executives of the American Cotton Manufacturers Institute, elected April 7 at Hollywood Beach, Fla., were L. G. Hardman Jr. (first vice-president), F. E. Grier (president) and Halbert M. Jones (second vice-president).

Sibley, Bailey, Self, Hagood, Wright, Hallett, Rees, Chapman, Higgins, Ruhm, Glenn, Milliken, Jewell, Smith, Montgomery.
Cone, Brayton, Brower, Chace, Jackson, Hardman, Grier, Winget, Jones, Love, McKissick, W. Cannon, C. Cannon.

Newly-elected officers and directors, as well as hold-over directors and past presidents, were pictured at the conclusion of the A.C.M.I. convention. Seated: Ceasar Cone of Cone Mills Corp. (new director); Lawton S. Brayton of Sagamore Mfg. Co.; E. N. Brower of Brower Mills; Malcolm G. Chace Jr. of Berkshire-Hathaway (new director); Robert C. Jackson (executive vice-president of the A.C.M.I.); L. G. Hardman Jr. of Harmony Grove Mills (first vice-president); F. E. Grier of The Abney Mills (1956-57 president); A. K. Winget of American & Efird Mills (retiring president); Halbert M. Jones of Waverly Mills Inc. (new second vice-president); F. Sadler Love (A.C.M.I. secretary-treasurer); Ellison McKissick of Alice Mfg. Co.; W. C. and C. A. Cannon of Cannon Mills Co.

Standing: W. A. L. Sibley of Monarch Mills; P. S. Bailey of Clinton and Lydia Mills; James C. Self of Greenwood Mills; B. F. Hagood of Pickens Mill (new director); George M. Wright of Abbeville, S. C.; H. K. Hallett of The Kendall Co.; Ernest Rees Jr. of Elk Cotton Mills; James A. Chapman of Inman Mills; R. R. Higgins of The Kendall Co. (new director); H. D. Ruhm Jr. of Burlington Industries; George E. Glenn Jr. of Exposition Cotton Mills; Roger Milliken of Deering, Milliken & Co. (new director); J. Craig Smith of Avondale Mills; and Walter S. Montgomery of Spartan Mills.

compelled to mention although an average number of years in the textile industry leaves me somewhat numb regarding any constructive suggestions. Our basic problem—the attempt to direct habits and motivations—is not primarily a matter of selling one fabric against another, nor one finish against another, nor even one fiber against another. It is to make the consuming public apparel-conscious, drapery-conscious, in a word, textile-conscious—as they are already car-conscious, television-conscious and fresh-strawberries-in-the-Winter-time-conscious. It might seem that the simple answer would be the direct approach of a co-operative industry effort since the accruing benefits would be industry wide. In the textile industry, however, which has so fruitfully fostered the individuality of genius—or, perhaps, the genius of individuality—the simple is frequently the eccentric. Complete industry co-operation, founded on a unanimous acceptance of a common interest, is, in a sense, a newly-arrived Japanese import. Granting its impracticability in promotional efforts, we could hope for a new emphasis or direction in textile advertising whose combined effect might achieve the same results."

Expanding Cotton's Markets

Building confidence in cotton is the big job faced by the cotton industry in stemming the invasion of its markets by competitors, Dr. M. K. Horne Jr., chief economist of the National Cotton Council, stressed at the Friday morning panel devoted to cotton market expansion.

He declared that the real forces which determine the selection of one fiber over another are long-range forces. "A manufacturer, before substituting one fiber for another, has to consider the effect on the quality of his product. He must consider whether the attitude of his customers is ripe for acceptance of the substitute fiber.

"He must think of his production set-up; whether his machinery and equipment are better suited for one fiber or the other. None of these conditions can be altered suddenly. But all of them most decidedly can be and are being altered by processes that require considerable time.

"One of these is research. Is a manufacturer's research program aimed at using cotton or other fibers in the years ahead? Is it aimed at making that cheaper rayon more and more acceptable as compared with cotton? Another is promotion. Which fiber is being pushed hardest in the market? Another is investment in new machinery. Is its machinery designed primarily for cotton or primarily for rayon or other fibers? These decisions, made today, tilt the scales toward cotton or its competitors in the years ahead."

In all these matters, the council chief economist observed, a powerful trend has been working and is now working against cotton and in favor of synthetics. "Cotton's competitive losses in 1955," he continued, "were the result of things we did or failed to do over a period of a good many years, and our competitive position for years to come will depend on what we're doing now."

These facts are being spotlighted in an intensive council program, he explained. It is being pointed out frankly that in the bulk of the market rayon staple has an advantage over cotton, in net mill cost, ranging from five to nine cents a pound.

After summarizing the factors in cotton's loss of markets abroad and its failure to keep pace with its competitors, percentagewise, in gains on the domestic market, he said that despite this disturbing situation some powerful forces are at work on the side of American cotton.

> The most dramatic of these forces is the trend in cotton production. Few things in our whole economy—few parts even of our fabulously progressive American industry—can match our cotton farmers as a whole in the rate at which they have moved toward more efficient methods in recent years.
>
> Less labor per acre and more yield per acre. When we put the two together and see what has been done in production per man-hour, we get the full measure of our progress. Over the past ten

years the trend has been up and up every single year—up 81 per cent in a decade.

Surely this isn't the kind of industry that should be resigning itself to a static or declining market. Surely it's an industry that has great resources to compete for markets and to build a bigger place in our prosperous, growing world economy.

FRANCIS EBENEZER GRIER of Greenwood, S. C., will have the distinction of serving as president of the American Cotton Manufacturers Institute and president of the South Carolina Textile Manufacturers Association at the same time. He became president of the industry's central trade organization on the closing day of the annual convntion in Hollywood, Fla., April 7.

Since last May 28 Mr. Grier has been president of the South Carolina group and will not relinquish this post until June 2, the closing day of the 1956 convention. This will give him nearly two months as head of national and state organizations of textile manufacturers.

Mr. Grier is president and treasurer of The Abney Mills, president and treasurer of Toxaway Corp. of Anderson, S. C., and chairman of the board of Erwin Mills, Durham, N. C. In these executive posts he holds the management reins over a total of 27 textile plants employing about 15,000 persons and containing a total of 615,000 spindles and 16,000 looms.

Ebe Grier was born Nov. 17, 1899, in Due West, S. C., attended Due West elementary and high school and received his B.A. degree from Erskine in 1920. He went to work immediately in the bookkeeping department of the National Union Bank of Rock Hill, headed by W. J. Roddey, who also was president of other banks, including one at Due West. Mr. Roddey was responsible for young Grier returning to Erskine in the Fall of 1921 as treasurer and business manager of the college to put affairs on a more business-like basis.

Mr. Grier remained at Erskine until 1924 (he is still treasurer of the college), when he returned to Rock Hill as an officer of the National Union Bank. The following year he was back at Due West, this time as president of the First Trust and Savings Bank of Due West. He remained there until 1927, when he again went to Rock Hill as vice-president and cashier of National Union Bank. In 1930 he was sent to Greenwood to open a branch of Central Union Bank (successor to National Union), of which he was vice-president.

In 1933 he became president of the Bank of Greenwood, now the State Bank and Trust Co., and retained that post until 1942. The bank was one of the executors of the estate of J. P. Abney, who owned five mills—Grendel and Panola at Greenwood, Anderson (S. C.) Cotton Mills, Belton (S. C.) Cotton Mills and Courtenay Mfg. Co. at Newry, S. C. When Mr. Abney died July 2, 1942, the family asked Mr. Grier, the bank president, to become affiliated full-time with the mills and to assume the presidency of the company. This he did and he is still president, although many other plants have been added to the Abney chain, as well as working control of Erwin Mills. Last year Abney leased five Textron Southern plants at Anderson, S. C., and bought them early this year.

Would a lower price help protect and build bigger markets? There are six ways in which a price cut could conceivably improve markets for U. S. cotton, Dr. Horne noted as he answered these questions:

(1) Would a lower price of cotton cause retail prices to decline?—"Not much. The farmer gets only 13 per cent of the average retail price of a cotton article."

(2) Would it help cotton compete for end uses in the short run?—"The short-run market improvement which cotton would get from various price reductions would not be as great as many people seem to think.

"A council study revealed that a 2½-cent price cut might be expected to give an improvement of 250,000 bales in the market; a five-cent cut, 760,000 bales; and a ten-cent cut, 1,440,000 bales. Considering how steep these price cuts would be, few producers would find this prospect attractive. At the same time, rayon might reduce its prices."

(3) Would it build confidence in the future of cotton?—"What would strengthen us would be the establishment of real confidence that not only now but across the years of the future we are going to have a price that remains competitive with rayon and other materials. And we can't possibly establish that confidence unless we make people believe: (a) that we are going to move as fast or faster than the synthetic fibers in lowering our cost of production and (b) that our price is going to be realistically geared to the declining cost of production."

(4) Would it discourage competitive production abroad? —"Over a period of years a lower price would discourage some foreign production of cotton, and thereby help our exports."

(5) Would it enable us to compete for exports in the short run?—"Foreign producers are likely to follow the price down just at low as they have to go. The real way to get at the problem is that outlined in Question Four—keeping them from producing cotton in the first place."

(6) Would it cause customers to increase stocks?—"Foreign stocks are low and need building up. What keeps them low is not the level of the price but a fear that the price will go lower. Once some confidence is established in the existing price structure, we should gain some exports as our foreign customers rebuild their stocks . . . but this would be a one-time, non-recurring gain."

The council chief economist emphasized that the biggest and most genuine benefits from a lower price would be the long-range benefits, but within a year's time the increase in consumption would be disappointing. Over longer periods, however, the resulting gains might run into millions of bales.

There is no way to build a future for American cotton upon price alone, the group was told. In the fiber market three great competitive weapons are at work—the price, the investment in research, and the investment in promotion. Cotton is out of line in all three.

"If we get ourselves an adequate program—adequate in price and research and promotion all combined—it seems very clear that within four or five years the total market for American cotton can be up to 16 million bales and headed on up toward 18 and 20 million or more—a market to match the dynamics of our production system. There is no other kind of outlook that makes any sense at all to the raw cotton industry," Dr. Horne concluded.

Compared with major advertisers and its competitors, the need for cotton promotion is staggering. In actual pur-

Fisher, Miss Cowden, DuPre

THE 1956 MAID OF COTTON, Patricia Anne Cowden, visits the Southern Utilization Research Branch of the Agricultural Research Service, U.S.D.A., in New Orleans, La. This is an important center for research on improved and expanded utilization of cotton. Describing some of the many developments are Dr. C. H. Fisher, chief of the branch, and Mason DuPre Jr., special assistant to the chief. In the picture they are explaining to the Maid of Cotton the advantages of a fabric especially designed and woven to meet requirements of the Defense Department for a lightweight cotton which is highly resistant to wind and water. This fabric was woven by means of a special loom attachment developed by the Southern Utilization Research Branch.

chasing power the cotton industry's budget for sales promotion not only has made no forward progress in the past six years, but has suffered a 30 per cent setback.

"This has come at a time when the total of all U. S. advertising and promotion was moving to heights well above anything in previous history," Ed Lipscomb, Memphis, director of sales promotion and public relations, National Cotton Council, said.

Mr. Lipscomb pointed out that if 63/100 of one per cent of the value of the raw product alone were spent on promotion of cotton, the bill would amount to approximately $19 million annually.

But cotton can do real good with less, the council's sales promotion head explained, because: (1) no product or commodity has greater editorial or publicity acceptance; (2) it can multiply its funds by generating direct promotion of cotton products by allied firms and groups to an extent which would be impossible for any brand and most industries; and (3) it can attract funds directly from groups for co-operative campaigns promoting various cotton products.

The council's sales promotion director used nearly a hundred slides in a pictorial presentation detailing the principles and practices of sales promotion for cotton. In the first part he answered five questions: what do we mean by sales promotion; where does it fit into our fight for markets; does cotton really need it; how much does it need; and can we do any good with less. In the latter half he gave examples of activity in which cotton's further promotion needs are small, medium and large.

Sales promotion, he explained, means "using the techniques and media of mass persuasion to sell products—the multiplication of sales impressions through print, pictures and sound." It can be used by cotton most effectively in those markets where personal preference and opinion are a major influence in sales. "It fits," Mr. Lipscomb said, "where prestige and convenience and human wants are a primary factor; and where, at the same time, quality and price handicaps are not as great as to preclude effective influence."

As an example of an activity where immediate additional financial needs are small, the Maid of Cotton tour was cited. Here, fundamentally, limitations are determined by the calendar and the number of activities in which one girl can participate.

In the "medium need" category of sales promotion, he placed the council's fashion campaign, pointing out the value of advertising consistently in top fashion magazines.

The need for sales promotion is large, budget-wise, Mr. Lipscomb said, in such markets as men's wear, work clothes, children's wear, domestics and rugs. The industry would benefit, he stressed, through substantial increases in advertising addressed directly to consumers.

Details of a finance plan which would allow the raw cotton industry to double its program of research and promotion to boost consumption of its products were then revealed by Clifton Kirkpatrick, Memphis, director of the National Cotton Council's field service.

Approved by the council's delegate membership at its recent annual meeting in Biloxi, Miss., it calls for increases in the payments now being made by the producer-ginner, warehouse, merchant, cottonseed crusher and spinner

Resolved . . .

. . . An essential prerequisite to the success of this program [to expand the consumption of cotton] is the establishment of reasonable limitations upon the imports of cotton products produced by low-wage industries overseas. We urgently petition our government to take the necessary action.

* * *

. . . It is resolved that the American Cotton Manufacturers Institute and its member mills urge, with all possible emphasis, that the use of asphalt-coated pick sacks by cotton producers be discontinued at once.

* * *

. . . that the united membership of the American Cotton Manufacturers Institute be recorded as unalterably opposed to United States membership in the Organization for Trade Co-Operation.

* * *

. . . We urge the Secretary of Agriculture to act promptly on this matter [making government stocks available to American manufacturers of cotton products for export at equalized prices now offered to foreign spinners], as export sales for future delivery are already being adversely affected.

* * *

. . . We strongly recommend to the Secretary of Agriculture that in establishing regulations governing the handling of the export sale cotton purchased from C.C.C. at reduced prices, he specifically prohibit the tender of this cotton on futures contracts.

groups. This will become effective at the beginning of the crop year in August 1957.

Participation of the industry under its present plan has reached approximately 70 per cent. This has climbed gradually from 30 per cent after the plan was initiated in 1945. While virtually 100 per cent participation is attainable, Mr. Kirkpatrick said, the expense and effort involved in reaching and maintaining this degree would outweigh the financial return.

The producer-ginner group now supplies more than half the council income. Other segments contribute proportionately. Present income from the producer-ginner group amounts to nearly a million dollars. Participation of this group has progressed steadily from approximately 33 per cent in 1945-46 to about 70 per cent in 1954-55.

Present payments amount to ten cents per bale for producers (collected by ginners), five cents per ton of cottonseed processed by crushers, two cents per bale on cotton merchandised, one-half cent per bale on cotton handled by the compress-warehouse group, and five cents per bale on cotton consumed by cotton mills. These payments are voluntary, and are made on the basis of written agreements.

Effective Aug. 1, 1957, this rate will be increased to 20 cents for the producer-ginner branch, 7½ cents for crushers, three cents for merchants, one cent for compress-warehouses, and ten cents for spinners.

Estimated revenue, based on present participation and the size of the 1954-55 crop, would be slightly in excess of $3 million, with the producer-ginner groups contributing approximately $1,900,000. Between now and August 1957, some 900 industry leaders will be working with interest organizations and individuals to implement the transfer to the expanded finance plan, Mr. Kirkpatrick said.

Final Session

The textile industry has run into unbelievable obstacles in government circles in its fight for cotton textiles import controls during the past year but will continue a determined fight so that the hundreds of thousands of employees of American mills will not lose their jobs.

Robert C. Jackson

This pledge was given by Robert C. Jackson of Washington, executive vice-president of the American Cotton Manufacturers Institute, in a frank report at the closing session.

"It would be an understatement," he declared, "to say that government policy-makers, especially those in the State Department, are firmly opposed to the textile industry's position in regard to the need for import limitations. Their point of view, with arguments they use to support these views, is constantly being given expression through public statements by government officials and in letters to members of our industry who write in on this subject."

It is disturbing that some of these government officials in many instances use out-dated figures and half-truths in refusing to grant relief that would save the industry from continued unfair competition by foreign low-wage countries, Mr. Jackson said.

The A.C.M.I. official paid tribute to the vigorous leadership of textile executives and keynoted the industry's hope that uncertainties and obstacles could be removed so the industry could move forward with courage and confidence in research, plant expansion, merchandising and other fields.

United States participation in the Organization for Trade Co-Operation (O.T.C.) would transfer U. S. government control of trade policy "to an organization subject to the control of foreign governments," Sen. Styles Bridges (Rep., N.H.) declared in a featured address, the convention-ending one.

The New Hampshire Senator voiced also his support of a bill which seeks to have the government maintain a fair share of the world market for U. S. cotton and to limit the importation of cotton goods into this country by the establishment of quotas.

He warned against the Customs Simplification Act bill in which he said there "exists the threat of tariff reduction through indirection" and which could "result in our present Congressional safeguards being circumvented."

He also issued this warning to the A.C.M.I. membership: "Those of you who favor the establishment of quotas should not be misled into making any concession of O.T.C. and G.A.T.T. legislation for your own near-term purposes. It would be a serious, and possibly later, a fatal mistake."

L. G. HARDMAN JR. of Commerce, Ga., now first vice-president of the American Cotton Manufacturers Institute, is in line to take over the presidency next year of this central trade association of the nation's cotton textile industry. Mr. Hardman was elevated at the closing session of the institute's seventh annual meeting.

The new first vice-president is a native of Commerce, son of the late Governor L. G. Hardman of Georgia. He is president, treasurer and chairman of the board of Harmony Grove Mills Inc. of Commerce. He served as president of the Cotton Manufacturers Association of Georgia in 1950-51.

He has long been active in textile industry affairs as well as in a variety of civic and social enterprises. He formerly served as a director and a member of the executive committee of the A.C.M.I., and as a director of the Cotton-Textile Institute.

HALBERT McNAIR JONES of Laurinburg, N. C., the new second vice-president of the American Cotton Manufacturers Institute, has a background of a quarter of a century in textile manufacturing. He has been president and treasurer of Waverly Mills Inc., Laurinburg, since 1935. He first became associated with that corporation in 1931 and was elected treasurer in 1932. He also is vice-president and treasurer of Scotland Mills Inc., Laurinburg, of which he was a joint organizer in 1939, and is treasurer of Morgan-Jones Inc., New York City.

Mr. Jones has been an ardent worker in behalf of the textile industry for years. He is a past president of The Carded Yarn Association and a director of A.C.M.I. and the North Carolina Textile Manufacturers Association.

Opening, Picking, Carding & Spinning

Comparative Quality Characteristics of Selected Growths of Cotton in the 1955 Crop

By J. M. COOK, In Charge, Clemson Cotton Laboratory, Cotton Division
Agricultural Marketing Service, United States Department of Agriculture

Murphy Cook's practical report on the current cotton crop was presented twice in recent weeks—at the Cotton Research Clinic and at the Spinner-Breeder Conference. It's valuable reading for those who weren't at either meeting.

EACH Fall there is a rush by cotton merchants and mill men to get all available information on the quality of the new crop. Through various channels they obtain this information and plan their purchases accordingly. When the first samples from the early crop are of poor quality, an effort will be made to keep a supply of old cotton on hand and the buying of new cotton will be postponed until later in the season, with the hope that the midseason and late parts of the crop will be better than the first. At the same time, samples from other areas of the Cotton Belt will be tested to determine if the cotton is suitable for their needs, for we know that one area may produce below average cotton while another, not so far away, will be much better in quality.

This difference in quality of cotton grown in one section as compared with that from another gives the cotton buyer a real problem, since he would like to obtain, in most cases, as even-running lots as possible for his mill customers, and at the same time at as low a price as he can. It has been very influential in encouraging buying according to the general area in which cotton is grown, such as Delta, Eastern, Texas or California. These terms bring to the mind of many mill men relative qualities equally as pertinent as fiber properties, such as fineness or strength.

These differences in quality also present problems after the cotton has been delivered to the mill because, not only are there variations from area to area, but within one area as well, and the mill desires the day-to-day mixes as high in quality and as uniform in quality as the available supply will allow. When the product drops below the standard in quality, such as strength, appearance or running quality, a change must be made.

Instruments for measuring the fiber properties of cotton have been developed and become available to the trade over the past few years. It is possible through their use to hold day-to-day mixes fairly uniform. The testing of bale samples for length, length uniformity, strength, fineness and maturity according to area in which they are grown, and the proper application of these data will aid in holding mixes at the level of quality desired.

Samples and Test Data

The cotton division of the Agricultural Marketing Service, U. S. Department of Agriculture, has been making fiber and spinning tests during the past ten years on samples from cotton growing areas across the Cotton Belt. Spinning test lots consisting of from 15 to 35 bale samples are collected by the classing offices to represent a particular period of harvesting from each gin point represented. The samples selected are of the predominating grade and staple received from producers organized for cotton improvement. Early, midseason and late harvested samples each are composited to represent the particular part of the season. The data from these tests are published monthly as the cotton is harvested, and then a summary report for the whole season is published after samples from all areas are tested. Thus, one may obtain from a study of the results of these reports comparisons of the time of harvesting, location of growths, varieties and seasonal conditions.

Cottons representing the most popular varieties grown in the United States, and thus most of the staple lengths produced, are included in the study. The bulk of the cottons grown, however, are from varieties bred to produce staple lengths of 1-1/32 to 1-3/32 inches. Because of this, those varieties producing cotton in this staple length range were selected for this paper. In some locations the average staple for a particular lot was shorter than 1-1/32-inch, however, the lot was included since it was from one of the selected varieties.

The fiber tests made on each spinning test lot are as follows: (a) fiber length by Fibrograph; (b) fiber fineness and maturity by Causticaire method; (c) Pressley strength; (d) Shirley Analyzer non-lint content; (e) soluble sugar content; and (f) color measurements.

Spinning test data obtained include: (a) manufacturing waste; (b) neps in card web; (c) yarn strength; (d) yarn appearance.

Bleaching and dyeing tests were also carried out on all spinning lots, and mercerizing data were obtained for lots from which combed yarns were spun. The data on the finishing tests are not included in this report. Each lot of cotton included in this study was spun into carded 22s and 50s counts of yarn. Standard laboratory techniques and procedures were used in all of these tests so that the results from one sample of cotton are comparable with any other.

The results from all lots of the selected varieties from each state and time of harvesting were averaged for the particular spinning criteria of quality and fiber property. In some states more than one variety was represented. In all areas, the seasonal conditions varied from place to place and, doubtless, had an influence on the results. The average from a particular state, however, is probably more in line with a mill mix than could be obtained from a single gin point.

Yarn Strength

Table 1 lists the average break factor for the two counts of yarn spun from the samples of each state according to the time of harvesting. In all states except Arizona the early cottons produced the strongest yarns. This was followed by the midseason lots, with the late samples yielding the weakest yarns. Those from Arizona were in reverse order, with the late samples giving the strongest, the midseason the second, and the early the weakest.

The cottons from three states—North Carolina, South Carolina and Arkansas—produced yarns that showed a difference in average strengths of ten per cent or more between the early and late season harvestings. Those from six states showed a difference of between five and ten per cent. These were Tennessee, Mississippi, Missouri, Louisiana, Texas and Arizona, with the weakest cotton from Arizona coming from the first picking. Cottons from the other three of the 12 states reflected less than five per cent difference between the first and late season pickings. It should be noted that each of these gave differences greater than three per cent, which is considered significant.

The level of quality of yarn, as reflected by strength, varied over a wide range—from 1880 as the average for the late cotton from North Carolina, to 2532 for the early cotton from California, a difference of more than 34 per cent.

The cottons producing the strongest yarns were from California with break factors ranging from 2532 for the early cotton to 2443 for the late. The yarns from the Alabama grown cottons were about four per cent lower—ranging from 2435 to 2355. These were followed closely by those from Georgia and Tennessee at less than two per cent lower level. The weakest yarns were spun from the North Carolina cottons with break factors ranging from 2072 to 1880.

Cottons from three states reflected much greater differences between the early and midseason samples than between the midseason and late season. This is true with the Mississippi, Missouri and Arkansas cottons. In these three states the yarns from early samples were more than five per cent stronger than the midseason.

From these results it is apparent that there was a significant difference in the quality of the early and midseason cottons, and midseason and late samples for strength of yarn, with the later cottons reflecting the lower strengths.

It is interesting to note these data, which are averages, and estimate the difficulty of obtaining mill mixes that are even-running from the standpoint of yarn strength. The necessity of using a mix representing several shipping points, I think, may readily be seen if one is to retain a fairly uniform mix from day to day.

Yarn Appearance

Table 2 lists the average yarn appearance index for the two counts spun from the lots of cotton according to state and time of harvesting. (A C-plus grade is considered an index of 100; an index of 90 equals C; and one of 110 equals B.) The early and midseason samples were not consistent in their quality for producing smooth yarns. Note that the early season gave slightly higher grades than the midseason from five states, while the midseason from three states gave higher grades than the early, and the grades from the early and midseason were the same in four states.

The late cottons produced the lowest yarn grades of the three harvestings from 11 out of the 12 states. This proportion is the same as that indicated by the yarn strengths. The average from each harvesting period for Alabama was at the same level, namely, between the C-plus and B grades.

The highest yarn grades for all states were produced by the early samples from Tennessee. (It will be remembered that these samples also produced next to the strongest yarns of any of the rain-grown areas.) The next highest were from the early samples from Texas. If we average the early and midseason results from each of these two states, the levels are about the same, at index 108, or almost a B yarn.

The yarns of lowest appearance grades were from the Arizona samples, with the next to lowest from California. The average of early and midseason from Arizona was 94.5, between a C and C-plus grade, while that from California was 99.5, or a C-plus.

It is apparent that the late season cottons, on the average, were not as good as the early and midseason for producing yarns of high appearance grade. Let us look at the fiber properties of these cottons and see if we can detect something that could be used as a guide in making the selection of cotton more reliable for obtaining desired end results.

Fiber Properties—Length

Table 3 lists the average classer's staple lengths and Fibrograph lengths for cottons of this study according to state and time of harvesting. The staple lengths as given by the classers did not show a consistent difference between the early and midseason samples. Notice that three of the early season samples were slightly longer than the midseason—those from South Carolina, Arkansas and Texas—and three of the midseason slightly longer than the early season, namely North Carolina, Tennessee and Missouri. The averages from six states showed the early and midseason the same length. In two states—Mississippi and Arizona—the averages from all three harvestings were at the same level.

The late season samples from six out of the 12 states averaged shorter in staple than either the early or midseason samples. Although these differences are small, they indicate that the classers probably detected a difference in the cotton and so called them, since the number of bales on which these points were based ranged from approximately 80 to several hundred. There was no sample of the late cottons that averaged longer than either the mid or early season.

The samples from California averaged the longest at slightly less than 1-3/32 inches. The averages for Tennessee, Missouri, Louisiana and Arizona were at approximately the same level, namely 1-1/16 inches. Those from North Carolina and Texas averaged the shortest at slightly less than 1-1/32 inches.

The Fibrograph results showed that the samples of the midseason from three states were slightly longer than either

Table 1.—Average break factor for yarns spun from 1955 cottons, by state and harvesting period

Season	N.C.	S. C.	Ga.	Ala.	Tenn.	Miss.	Mo.	Ark.	La.	Tex.	Ariz.	Calif.
	Average break factor for 22s and 50s yarn spun from 1955 crop grown in											
Early	2072	2292	2387	2435	2431	2321	2370	2399	2150	2254	2204	2532
Midseason	2039	2219	2360	2414	2346	2179	2256	2233	2087	2214	2359	2519
Late	1880	2017	2274	2355	2293	2121	2166	2165	2000	2120	2396	2443

Table 2.—Average yarn appearance for yarns spun from 1955 cottons, by state and harvesting period

Season	N. C.	S. C.	Ga.	Ala.	Tenn.	Miss.	Mo.	Ark.	La.	Tex.	Ariz.	Calif.
	Average yarn appearance index for 22s and 50s yarn spun from 1955 crop grown in											
Early	102	102	104	105	111	104	103	106	102	107	95	100
Midseason	102	106	104	105	106	104	100	101	104	110	94	99
Late	95	96	102	105	98	101	95	100	99	100	91	96

Table 3.—Average length of 1955 cottons by state and time of harvesting as shown by Fibrograph and classification tests

Season	N. C.	S. C.	Ga.	Ala.	Tenn.	Miss.	Mo.	Ark.	La.	Tex.	Ariz.	Calif.
	Average Fibrograph and classer's lengths for 1955 crop grown in											
Early Fibrograph												
UHM length	1.02	1.03	1.05	1.05	1.03	1.05	1.04	1.04	1.04	1.02	1.06	1.06
Classer's length	$1\frac{1}{32}$—	$1\frac{1}{16}$—	$1\frac{1}{16}$—	$1\frac{1}{16}$—	$1\frac{1}{16}$	$1\frac{1}{16}$—	$1\frac{1}{16}$	$1\frac{1}{16}$	$1\frac{1}{16}$	$1\frac{1}{32}$	$1\frac{1}{16}$	$1\frac{3}{32}$
Midseason Fibrograph												
UHM length	1.01	1.01	1.05	1.04	1.05	1.05	1.07	1.08	1.04	1.01	1.06	1.07
Classer's length	$1\frac{1}{32}$	$1\frac{1}{32}$	$1\frac{1}{16}$—	$1\frac{1}{16}$—	$1\frac{1}{16}$+	$1\frac{1}{16}$—	$1\frac{1}{16}$+	$1\frac{1}{16}$—	$1\frac{1}{16}$	$1\frac{1}{32}$—	$1\frac{1}{16}$	$1\frac{3}{32}$
Late Fibrograph												
UHM length	1.00	1.01	1.04	1.04	1.04	1.03	1.05	1.05	1.04	1.01	1.07	1.07
Classer's length	$1\frac{1}{32}$—	1+	$1\frac{1}{32}$+	$1\frac{1}{32}$+	$1\frac{1}{16}$	$1\frac{1}{16}$—	$1\frac{1}{16}$	$1\frac{1}{16}$—	$1\frac{1}{16}$—	1+	$1\frac{1}{16}$	$1\frac{1}{16}$+

Table 4.—Average fiber fineness and maturity by state and harvesting period

Season	N. C.	S. C.	Ga.	Ala.	Tenn.	Miss.	Mo.	Ark.	La.	Tex.	Ariz.	Calif.
	Average fineness and maturity determinations by Causticaire for 1955 crop grown in											
Early												
Fineness	4.3	4.4	4.3	4.2	4.5	4.5	4.2	4.4	4.3	4.4	4.2	4.4
Maturity	78	78	78	76	79	81	78	80	79	79	79	79
Midseason												
Fineness	4.3	4.4	4.1	4.1	4.2	4.4	4.2	4.3	4.4	4.4	3.9	4.2
Maturity	77	77	76	76	76	78	75	77	78	80	78	79
Late												
Fineness	4.1	4.0	4.1	4.0	4.1	4.0	3.8	4.1	4.1	4.1	3.8	4.0
Maturity	77	77	78	77	77	77	76	77	78	79	76	79

Table 5.—Average fiber strength by Pressley tests using O-gauge between clamps

Season	N. C.	S. C.	Ga.	Ala.	Tenn.	Miss.	Mo.	Ark.	La.	Tex.	Ariz.	Calif.
	Average Pressley strength, O-gauge, for 1955 crop grown in											
Early	75	77	78	77	81	78	81	82	74	81	85	92
Midseason	72	76	77	76	82	77	80	80	75	79	87	89
Late	69	72	77	78	80	78	78	80	75	78	87	86

Table 6.—Average fiber strength index by Pressley tests using $\frac{1}{8}$-inch gauge between clamps

Season	N. C.	S. C.	Ga.	Ala.	Tenn.	Miss.	Mo.	Ark.	La.	Tex.	Ariz.	Calif.
	Average Pressley strength, $\frac{1}{8}$-inch gauge, for 1955 crop grown in											
Early	93	98	101	99	102	99	101	103	97	102	108	115
Midseason	92	95	95	98	105	102	105	103	98	100	112	113
Late	89	93	94	101	100	99	99	100	96	98	112	110

the early or late season samples. The other samples did not reflect as great a difference in but one case, namely, the early season from South Carolina averaged .02 inch longer than either the mid or late season. Three of the averages for early season showed longest, three of the midseason were longest and one of the late season. Three of the early season averaged shortest, two of the late season averaged shortest and none of the midseason were shortest.

The midseason samples from Arkansas were the longest of any, and the midseason from Missouri were at the same level as the longest from Arizona and California, namely 1.07 inches. Those from Georgia, Alabama, Tennessee, Mississippi and Louisiana averaged about the same length, when all three pickings are considered. The shortest were from North Carolina, South Carolina and Texas at between 1.01 and 1.02 inches. These results indicate that the classer detected more of the poorest spinning lots, and expressed this by calling the staple slightly shorter than the others.

Fineness and Maturity

The average fiber fineness and maturity according to time of harvesting and state are shown in Table 4. There were four states from which the samples of the early harvesting averaged .2 microgram per inch or more coarser than those of the second picking. These were Georgia, Tennessee, Arizona and California. One of these four showed three per cent difference in maturity, and for this the early sample was slightly more mature. Thus, the difference in fineness between the early and midseason samples shown by these states was, doubtless, due to a coarser fiber for the early cotton rather than high maturity of fiber.

The results from 11 states indicated the late season samples as being finer than either the early or midseason. These differences ranged from .1 microgram per inch (three states) to .4 microgram per inch. In all cases, with the possible exception of Arizona, the maturity should have had only a negligible effect on these differences in fineness. The fiber maturity measurements showed the early season samples more mature from eight out of the 12 states.

Campbell, McVey, Hunter, Bolton

A textile machinery panel on "New Developments in Textile Machinery and Influences on Raw Cotton Selection" was featured at last month's Spinner-Breeder Conference in Charlotte, N. C. Pictured are: Dean Malcolm E. Campbell of North Carolina State College School of Textiles, who presided; Elmer McVey, vice-president of Saco-Lowell Shops; James H. Hunter of James Hunter Machine Co. and vice-president of the American Textile Machinery Association, who introduced the panelists; and John H. Bolton Jr., vice-president of Whitin Machine Works.

Strength

The average fiber strengths in 1,000 pounds per square inch using O-gauge between the Pressley clamps are shown in Table 5 for each state and time of harvesting. The results from five out of the 12 states gave strengths in order of strong to weak as early, midseason and late samples, or in the same order as the yarn strength results. These states were North Carolina, South Carolina, Missouri, Texas and California.

The results on samples from two of the states—Mississippi and Arkansas—showed large differences in yarn strengths between the early and midseason. The fiber samples of the Mississippi cottons broke at 78,000, 77,000 and 78,000 for the early, midseason and late respectively. The Arkansas samples broke at 82,000, 80,000 and 80,000, respectively, for the three pickings. I do not believe these differences would be significant in influencing yarn strengths.

The Louisiana samples gave yarn strengths that were 7.5 per cent stronger for the early season than the late, yet the fiber strength was slightly stronger for the late than the early. The Arizona samples from the mid and late season crop were slightly stronger than the late season from California, yet the late-season samples from California gave stronger yarns than either. The Mississippi samples were at about the same level of strength as the Georgia and Alabama samples, yet they produced weaker yarns than either.

Referring to Table 6, the fiber strength results as an index when using a 1/8-inch spacing between clamps, it may be seen that samples from five states gave strengths in the same order as the yarn strengths. (The index may be calculated by dividing 3.19 into the strength-weight ratio and multiplying by 100. The 3.19 is the average ratio for the cottons tested from the 1954 crop.) The five states were North Carolina, South Carolina, Georgia, Texas and California. The early and midseason samples from Arkansas broke at the same level, with an index of 103.

Although the strengths for the early and midseason samples were not consistent, in that those from some states reflected stronger fiber for the early and others for the midseason cottons, it should be noted that the samples from late season in nine out of the 12 states averaged weaker than the early or midseason. They were lower than either the early or midseason by two or more in seven out of the 12 states. Probably this is more nearly in line with actual yarn strength results than any other fiber test results. The coefficient of correlation of these results and yarn break factor is .62 as compared with .55 for the results from O-gauge strengths. It appears that the fiber strength of the cotton for this year is not as significant in estimating probable yarn strength as it has been on many previous crops.

Summary

Fiber and spinning test data on commercially grown varieties that were bred to produce staple lengths of 1-1/32 to 1-3/32 inches are included in this study. Results from early, mid and late season harvestings are represented and each is averaged according to the state in which the cotton was grown.

The yarn strength data indicated that the quality of the cotton fell off in all states except Arizona as the season progressed. The early season samples gave stronger yarns, on the average, than the midseason, and the midseason gave stronger yarns than the late season. This order was reversed for the Arizona samples.

The average yarn appearance grades for the early and midseason samples did not reflect a consistent difference in favor of either period of harvesting. The samples from the late picking in 11 out of the 12 states were manufactured into yarns giving the poorest appearance. In some cases the grades were only slightly lower than the early or midseason, but in most comparisons the differences were significant.

The average classer's lengths for the samples of each harvesting period of all states indicated that there were no consistent differences between the lengths of the early and midseason samples. Some comparisons showed slightly longer staple for the early cottons, however, there were six states that showed the first and second pickings as the same length. The late season samples in six out of the 12 states were called slightly shorter, on the average, than either the early or midseason, which indicates that the classer may have detected a difference in quality. The Fibrograph results did not reflect enough difference between the three harvestings to account for the differences in yarn strengths.

The late samples from 11 out of the 12 states were slightly finer fibered than either the early or late cottons. Seven of the early season periods showed slightly coarser fiber than either the midseason or late. The fiber from the early samples in eight of the 12 states was slightly more mature than the midseason or late. These differences varied from one to three per cent, and normally would not be considered significant. There was no consistent difference between the other harvestings.

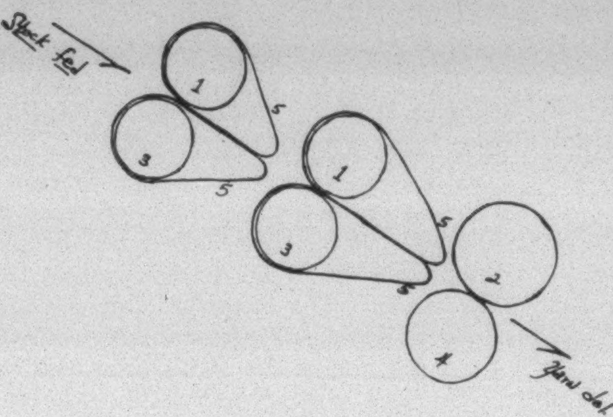
Fiber strength results using O-gauge between clamps did not show enough differences between the early and late samples in but three states to lead one to expect lower strengths from the late cottons. These were North Carolina, South Carolina and California, although they were averages from five states that showed the same trend from early through midseason to late.

The strengths obtained from the Pressley tests using a $\frac{1}{8}$-inch spacing between the clamps did not show enough difference between the early and late season cottons to account for the difference in yarn strengths in but two states. Generally speaking, most of the differences shown were too small for one to consider highly significant for a particular state when selecting cottons for a mix.

Ultra-Spinning

A Home-Made Changeover

A NEW idea for spinning changeover is now undergoing mill testing at D. E. Rhyne Mills Inc., Lincolnton, N. C. Known as Ultra-Spinning, the system was conceived some seven years ago by Johnathan Rhyne, executive vice-president of D. E. Rhyne Mills. Developing a theory of his own, Mr. Rhyne has come up with what is essentially a variation of the Casablanca system patented around 1900. His theory is that the least amount of twist in roving makes the best quality yarn, therefore he takes as much twist out of the roving as possible. Yarn spun on the Ultra-Spinning system is being designated Ultra-Spun yarn.



This diagram shows how stock is fed into the Ultra-Spinning changeover system. No. 1—top knurled rolls; No. 2—top cushion front roll; No. 3—bottom knurled rolls; No. 4—bottom fluted front roll; and No. 5—top and bottom drafting aprons.

Improvising most of the way, Mr. Rhyne ordered the necessary parts custom-made from first one shop and then another. Major cost in developing the system was spent on designing and making a new type cradle. The first frame to be equipped with the system was a 48-spindle sample frame. Later it was installed on two frames of four-inch gauge, $2\frac{3}{4}$-inch rings. The production frames have been using the changeover for about five months now, Mr. Rhyne reports, with very encouraging results.

The outstanding features of the changeover are said to be its simplicity, better quality yarns produced and lower production costs. The conventional back roll is replaced with a knurled roll. Then getting the system into operation is simply a matter of adjusting the newly-designed cradles and the aprons and weights. The accompanying diagram shows how stock is fed into the system.

The changeover can be applied to most frames. In order to complete the changeover, frames must have new cradles front and back, and should also be equipped with a suction cleaning system to take care of extra lint created by higher drafts. Carded yarn counts have been spun by Mr. Rhyne from 5s to 50s, Ultra-Soft Spun and Ultra-Warp Spun with drafts of 25 to 80. Combed yarn counts have also been spun from 14s to 40s with drafts ranging from 40 to 128. He said all yarns run have tested better than yarns made from same stock on conventionally used shorter drafts.

Johnathan L. Rhyne, who developed the Ultra-Spinning system, checks the gear housing on one of the spinning frames equipped with his changeover system.

This series is being presented with one idea in mind. This idea is fundamental in every respect and should be expounded by every thinking textile operator and executive. Very plainly, and simply, we are just trying to put a little science in the mill business.

In an age when the sonic barrier is a lingering memory; when men are splitting atoms; when the secrets of the most dread and baffling diseases are gradually being unravelled by diligent and unrelenting researchers; when human activities are being flashed through the ether, across the country and into your living room by the miracle of television; and a myriad of other wonders are taking place, we owe ourselves in the textile industry the debt of acceptance of the skills nurtured and developed so carefully by engineers, technicians and advanced thinking operatives. Each top level executive owes his stockholders the debt of keeping as progressive as possible with the funds at hand. Each company must accept, some more than others, changes in operating policy if the company is to remain in a competitive position with the rest of the industry. As one company moves forward with swift, sure steps, so must all move forward with swift, sure steps. For the ones who are stagnant are, necessarily, left behind.

This series is being presented, then, to help bring a little science into the mill without making a great expenditure of money a necessary prerequisite. It is directed at the people who believe that we must make certain we are getting the most out of our existing equipment before we can even consider purchase of new equipment. Why buy new equipment when the present equipment is not operating under the best conditions?

So much for the purpose and aspiration of this offering. Now to get at it.—*Gus Guggenheim.*

A Manual for Testing Procedures

By GUS GUGGENHEIM—Part One (Cleaning Machinery)

IT is impossible to overstate the cause for good work out of the opening, picking and carding phases of the mill operation. As has been said many times, the house can be no better than the foundation it is built upon. And the foundation of the textile mill is the opening, picking and carding operations.

The opening hoppers are the first pieces of machinery to be utilized in most mills. Therefore, the testing program should begin with the opening hoppers. A simple and direct method of insuring the proper amount of stock being processed through each opening hopper is outlined in the following paragraphs.

Suppose a hypothetical cotton mill wishes to process 300,000 pounds of stock in a 120-hour week through 15 opening hoppers. It is evident that if this stock is to be run through each of the hoppers in equal quantities, the settings between the combing roll or sargent comb and the lifting apron must be uniform. For best running conditions with respect to blending of the stock and wear and tear on the equipment, each opening hopper should be adjusted to produce the same number of pounds of stock in a given length of time. The merit of this line of thinking is self-evident.

In order to test the machinery and insure this proper amount of production it is necessary to collect and weigh a sampling of the production. This is accomplished by holding a piece of cardboard or paper between the delivery of the hopper and the conveyor belt (or whatever other means may be used to move the stock along its way) for a given length of time. Suppose, for convenience, two minutes be chosen for the testing period. Steps should be taken to insure a constant peak delivery during the full period of the test. However, usually all that is necessary is to block out a mercury switch or other type of switch which automatically controls the running time of such machinery.

The amount of stock caught in this manner should now be weighed, the more accurately the better although a regular pound and ounce scale will suffice. The weight is now divided by the length of time the test was run, expressed in minutes. Thus, the formula:

$$\text{lbs. min.} = \frac{\text{Weight of Stock Processed (pounds)}}{\text{Length of Time (minutes)}}$$

In the case of the hypothetical mill mentioned previously, the pounds run would equal approximately 5.6 if the length of time of the test was two minutes. Plugging the numbers into the formula: $\frac{5.6}{2} = 2.8$ pounds/minute.

Repeat the test in the same manner for each opening hopper until each hopper has had at least one accurate test. Now, by comparing the answers it will be readily apparent whether one or more of the hoppers in the line is doing more or less of its share of the job. If it is more convenient to make the calculation in terms of ounces per minute instead of pounds per minute, then, by all means, do so.

If, after finding a hopper which is not producing the proper amount of stock, it is found that the settings between the combing roll or sargent comb and the lifting apron is correct, the next step is to check the apron, noting condition of the slats, backs, pins, driving pulley size and surface speed. If these items are all in proper operation and condition the combing roll or sargent comb should be closely regarded. The doffer roll is the last place left to look if no sub-standard condition exists elsewhere.

Feeding Percentage

The next condition to be tested for proper operation should be the percentage of time which the opening line runs in order to keep a constant and uniform flow of stock going into the cleaning machinery. A good rule to follow is that the opening equipment must run approximately 85 to 95 per cent of the time the cleaning machinery is running. And, at the same time, it is well to note that the cleaning machinery should run approximately 85 to 95 per cent of the time the pickers run. Of course, the determining factor in this percentage of time running is the assurance that a constant and uniform flow of stock is delivered to the next operation.

The operation of the test is simplicity in itself. The length of time which the opening line runs is checked for a given running time of the cleaning line. When the results are established, with accuracy, divide the running time of the opening line by the running time of the cleaning line and multiply the result by 100 per cent. Thus, the feeding percentage is calculated. If this percentage falls outside the 85 to 95 per cent limits mentioned above, the opening line may not be properly set up. The hoppers are either feeding too much within a relatively short period of time or the hoppers are set too close and are failing to send a constant and uniform amount of stock along its way.

As an example, suppose we desire to run a 60-minute feeding percentage test. During the 60 minutes of the test suppose the opening line was stopped 18 times and the average time which the line was stopped was 35 seconds. (An average time is denoted here for reasons of simplicity and clarity. Actually, the stopped times would vary considerably. There is no need to average these stopped times. Simply add them and use the sum in the calculation of the feeding percentage.) During the time of the 60 minute test, suppose the pickers ran 56 minutes. The minutes stopped time of the opening line is now determined by multiplying 18 times 35 seconds and dividing the sum by 60 seconds per minutes.

The feeding percentage is calculated by dividing the running time of the opening line by the running time of the pickers, which, for our example, is 56 minutes. The whole calculation is shown below.

$$\text{Opening line running time} = \frac{18 \times 35\ \text{sec.}}{60\ \text{sec./min.}} = 49.5\ \text{min.}$$

$$\text{Feeding percentage} = \frac{49.5}{56} \times 100\% = 92.7\%\ \text{(Approx.)}$$

If any one picker should be out of normal operation for any length of time it will be best to disregard the test. If either the operation of the opening line, cleaning line or pickers is controlled by some type of variable-speed drive, this test is not applicable.

The merit of the test will be proved when it is run and one of the lines is found to be operating at a sub-standard rate. The operator will know that he is not receiving full benefit from his equipment. The settings will be too close or too open and the ratio of feed will not be as uniform as possible. A few big chunks or lumps of stock do not mix, blend and process as well as a lot of small ones.

Provided the results of the two previous tests are satisfactory and assuming that the settings and speeds of feed rolls and beaters are as they should be, the stock now traveling from the opening room into the pickers is in good condition with respect to fluffiness and cleanliness and is ready to be converted into lap form and cleaned further. The pickers are the instrument of these means and with a fair amount of care an excellent job can be done by them.

There are many variables involved in the picking of the stock. The weights must be within a reasonably close tolerance. The inch-to-inch, foot-to-foot, yard-to-yard, and linear variations must be constantly checked and held within a reasonably close tolerance. These things being assured, there is no reason why a picker, admittedly a crude instrument as modern machinery goes, cannot produce a consistently uniform lap with a coefficient of variation not exceeding 1.5 per cent. In most cases one per cent is not without the bounds of practicality. The standard per cent coefficient of variation is, of course, dependent on local conditions. However, it is well to note here that even though a mill may be producing coarse fabrics and the use of a lower grade of cotton is prevalent, or perhaps exclusive, this same mill will benefit greatly by making a uniform lap. Obviously, lap uniformity results in closer yarn weights, on a bobbin-to-bobbin basis. Naturally, it follows that with improvements shown in the spinning weights, the weaving will run better, with less effort required to get full production.

The testing necessary to insure these reasonable requirements from the pickers are few and simple except for one small hitch. These few and simple tests must be performed with regularity and at frequent intervals. The decisions as to the frequency of the intervals is left to the individual reader, as the local conditions will dictate. To draw a simple analogy, an automobile with an oil filter should have the oil changed every 5,000 miles, and an automobile without an oil filter should have the oil changed every 2,000 miles. Neither condition is correct. The oil in an automobile should be changed when the *oil is dirty*. So it is that the picker should be overhauled when its operation begins to be faulty (with due respect to preventive maintenance). The operation of the picker should be tested frequently enough to insure that the conditions do not become too badly out of standard before corrective measures are undertaken.

The first test for pickers is lap weight. This test is undoubtedly being conducted by every cotton mill now in operation in the country. Whether the test is being conducted with accuracy is entirely problematical. Generally, the lap weight test is conducted by the picker tender. Since the picker tender is not a skilled worker, great care must be taken to provide him with a simple procedure to follow in carrying out his duties. The limits within which the laps must fall should be marked plainly so that no mistake will be made in reading the scale. The picker tender should be repeatedly impressed with the importance of his job since every pound of cotton in the mill must pass through his hands. Stories of picker tenders tearing off the last yard of a heavy lap so the lap weight will fall within the prescribed limits are all too familiar and show a really frightening laxity of supervision.

Length-To-Length Variation Within Lap

The subject of length-to-length variation has a broad scope. Many treatises have been written with regard to lap variation and it is suggested that these be investigated in conjunction with this humble work.

Some equipment is necessary for investigation of weight variations within the lap. The Saco-Lowell lap meter is a good instrument for this investigation. In most cases the lap meter is sufficient for the necessary testing. The Uster lap Varimeter is also extremely good for weight variation investigation. Much work is now being done with either or both instruments. A considerable amount of the work being done with them is more or less experimental. The Varimeter is a rather large capital investment (even though the advantages gained through its use make its original cost low) and may be impossible for some mills to obtain.

The Saco-Lowell lap meter can be put to good use in investigative work on pickers. With certain modifications the lap meter's value as an investigatible instrument may be greatly enhanced. The regular test run with this instrument is the weighing of one-yard pieces of lap and the plotting of these weights on a suitable chart. In this manner the total length of the lap is shown and can be analyzed.

The lap may start heavy, go to the light side and then return to normal, or any combination of these light and heavy trends. In this case, the indication would be that something is wrong with the feed or blending reserve of the picker. Radical changes in weight for rather long, say ten-yard, intervals would indicate an excessive drafting condition in the intermediate section. Radical changes in weight from light to heavy or vice-versa within a relatively short distance would indicate that the evener motion is sluggish in reacting to changes in the weight of the stock passing through the picker.

Certain types of defects will not show up clearly in yard-to-yard variation analysis. A repeating defect such as a choked screen, which makes a thin place every time the choke comes around, may show up twice in one yard and not at all in the next yard of finished lap. Lost motion around the calender rolls or lap rolls would also make repetitious defects which would be difficult, if possible at all, to find on the yard-to-yard analysis. For this reason it may be necessary to modify the lap meter to study lengths of less than one yard.

This modification is accomplished by placing one additional peg in the knock-off gear of the lap meter. The additional peg is placed exactly 180 degrees from the one peg already in the gear. The length of lap thus measured off is one-half yard, or, 18 inches. If the length weighed is halved, the weight on the scale must also be halved. For example, if a 14-ounce lap is being tested a 14-ounce weight is used on the scale. Now, if it is decided to test the lap 18-inch-to-18-inch, the weight on the scale will be one-half of 14 or seven ounces.

Making the proper weight is simple. If 16 ounces is 7,000 grains then the grain value for 14 ounces is found by using the proportion: 16 is to 7,000 as 14 is to X. Mathematically stated, this proportion is, as follows:

$$\frac{7{,}000 \times 14}{16} = X$$

Since we wish to know what half the value of X is,

$$\frac{7{,}000 \times 14}{16 \times 2} = X$$

Solving the above equation for X finds the grain equivalent for half of 14 ounces equal to 3,062.5 grains.

A temporary, but accurate, weight for the lap meter may be made in the following manner. Place weights equal to 3,062.5 grains on the end of the beam of an ordinary grain scale. Now, fill the basket of the scale with anything which has permanent and constant weight, such as: car keys, coins, gem clips, etc. When the scale comes almost into balance, wrap the several odd shaped objects with masking tape. Thus, the scale is brought into balance and the odd shaped objects are secured together making for easier handling. The weight may now be placed on the back of the lap meter scale. A weight of more permenant nature may be constructed by the mechanical department or machine shop of practically any mill.

Another modification of the Saco-Lowell lap meter is most helpful when testing is being done in an attempt to find the spots which are causing defective or off-weight laps. By placing three pegs 120 degrees apart around the knock-off gear, it becomes possible to investigate the lap on a foot-to-foot basis. The investigation of the lap on this relatively short-term basis makes the repetitious nature of some defects considerably easier to detect. The peculiar idiosyncracies of the evener motion may be studied in close detail. The evener's operation becomes quite clearly seen. Stack, or calender, roll defects, which are usually short-term by nature, show themselves readily in the light of foot-to-foot examination.

As in the 18-inch-to-18-inch studies which have been briefly covered in the preceding paragraph, it is necessary to revise the weight to be placed on the lap meter scale when making foot-to-foot tests on the picker lap. The method for finding the correct weight is exactly the same as previously explained, except the grain equivalent is divided by three instead of two. This makes the calculation for the weight for use in making foot-to-foot tests on a 14-ounce lap:

$$\frac{7{,}000 \times 14}{16 \times 3} = 2{,}041.6 \text{ grains}$$

After making a chart of the foot-to-foot variations of a lap, it is a matter of simple arithmetic to determine the part of the picker which is causing the sub-standard work. This is true if draft situations and roll diameters are known.

A more meticulous method for investigating the picker lap is on an inch-to-inch basis. One method of accomplishing this is through the use of the Uster lap Varimeter. The Varimeter weighs, electronically, one-inch lengths of lap and records these weights on a graph. When the Integrator is used in conjunction with the Varimeter, the per cent coefficient of variation is found instantly. However, it is beyond the scope of this writing to explain the methods used in picker lap investigation with the Varimeter. Suffice it to say, for our purposes, that the Varimeter is a most useful instrument.

Warp Preparation & Weaving

A Study in Loom Fixing

By FRANK D. HERRING — Part Seven

The purpose of this installment, and others in the series, is to help the beginner become a better loom fixer in a shorter period of time, as well as to enable the established loom fixer to become more efficient. They can do this by learning to avoid the wasted time spent in searching for the cause of trouble when a loom is flagged.

THE average loom fixer spends much more time searching for the actual cause of the trouble than is required to fix the loom once he has located the direct cause. In the process of hunting, he will usually do a lot of guesswork loom-fixing. This is bad because it will often get other parts of the loom out of adjustment, creating additional and unnecessary work for him. In this article, the trouble will be named and also the parts for the fixer to check which could contribute to the cause of the trouble.

Broken Battery or Hopper Stands—Replacing a broken battery stand is an expensive job. The stand is a costly part itself and when it is broken and falls to the floor, other parts mounted on it will also be broken and have to be replaced. Considerable time is required to do this job and unless some help is given to the fixer, he will usually fall behind on his job. Added to the expense will be much loss in production. So the loom fixer should know how to fix the loom and also know the things to check to prevent the trouble. Knowing what to check and doing it consistently is the very best kind of loom fixing because it is preventive loom fixing.

Replacing a broken battery stand is one of the most difficult jobs the loom fixer is ever called upon to do and a great majority of the present-day loom fixers do not know how to do this job correctly. However, the loom fixers are not as much to blame for this discrepancy as the supervisor who should make sure that all his loom fixers know how to do this job. There is only one way the fixer can replace a broken battery stand properly, and that is by using the loom builders' battery gauges.

When we speak of automatic looms, we are referring to looms equipped with mechanical arrangements to transfer the filling yarn into the shuttle while the loom is in operation without stopping. For this operation to be performed properly, the battery stand must be positioned exactly right in relation to the lay. This can only be done by using the battery gauges. Some weaving mills have all their loom fixers properly trained in the use of the battery gauges and these are the mills that have very few broken battery stands. Faulty transfer of the bobbins from the battery into the shuttle accounts for most broken battery stands. However, there are other things that can cause this trouble.

When the loom fixer is called to a loom with a broken battery stand, he should check the following parts in the order named:

Crank arm eccentric pins
Crank shaft bearings
Breast beam
Lay end straps
Pickers
Picker stick
Shuttle boring
Transfer mechanism

Sometimes the set screws which hold the crank are eccentric pins which will work loose and allow the pin to turn out of position. This will cause the position of the lay to vary and will cause faulty transfer of the bobbin from the battery into the shuttle which is contained in the lay. If the crank shaft bearings are loose, this same trouble will be the result. The battery stand is bolted and pinned into the breast beam and, if the breast beam is loose, it will throw the battery out of position in relation to the lay and cause faulty transfer.

Unless the pickers are in real good condition, they should be replaced with new ones before replacing the battery stand and using the battery gauges. If the picker on the battery end is excessively worn, it will allow the shuttle to go too deeply into the shuttle box and this will cause the ingoing bobbin to strike on the flat top of the shuttle spring slide strap. This will prevent a transfer of the bobbin, and it will sometimes break the battery stand. The least that this can do is to cause a faulty transfer.

If the lay end strap is out or excessively worn, it will also allow the shuttle to go too deep in the box. If the picker stick is worn where it contacts the lay end or lay end strap, it, too, will allow the shuttle to go too deep in the box. So by all means, the picker lay end strap and the picker stick should be new or in very good condition before the battery stand is put in place and bolted and pinned.

Illustrated in Fig. G is what happens when the shuttle goes too deep in the box. Number I is the shuttle spring strap; No. 2 is the ingoing bobbin being transferred into the shuttle by the transfer hammer (4) and transfer fork (3). It will be noted that the butt end of the bobbin is in

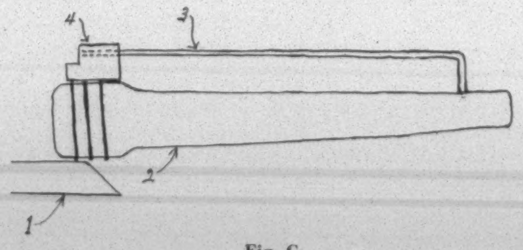


Fig. G.

contact with the flat top of the spring slide instead of the slide angle part. When this happens, something must give, so, the bobbin is either smashed or the battery stand is broken and too often it is the battery stand that is broken.

Shown in Fig. H is the correct position of the outgoing and incoming bobbins in relation to each other, and also in relation to the shuttle spring slide strap. Number I is the slide strap, No. 2 is the ingoing bobbin, No. 3 is the bobbin held in position by the shuttle spring or the outgoing bobbin, and No. 4 is the shuttle spring. It will be noted that the steel rings on the ingoing bobbin contact the outgoing bobbin behind the rings on the outgoing bobbin when transfer of the bobbin is made.

The fixer cannot put new pickers on all his looms daily, and the pickers will become worn as time goes on, and allow the shuttle to go somewhat deeper in the shuttle box. The slide angle on the shuttle spring strap compensates for this. As long as the butt end of the ingoing bobbin strikes on the slide angle of the strap, it will slide into proper place in relation to the shuttle spring, and be gripped by the spring and held in proper place in the shuttle.

After the above-mentioned things have been checked, the fixer should start the loom and check the boxing of the shuttle. After boxing the shuttle, he should then put the battery stand in place, using the battery gauges, and then drill the dowel pin holes and secure the stand in place. After securing the stand in place, he should then check the entire transfer mechanism to determine if the transfer hammer is in the correct position in relation to the steel rings on the ingoing bobbin when the bobbin is in place and the hammer at the extreme end of its downward stroke, or when the lay is on front center position and the transfer mechanism is in transferring position.

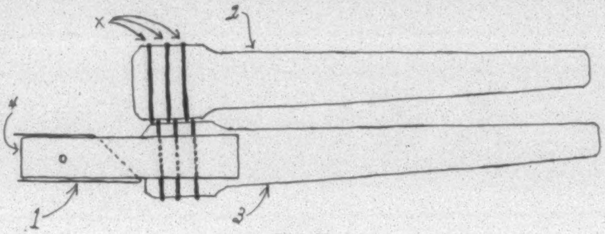


Fig. H.

The bobbin supports the feed pawl and the hold-back pawl should be carefully checked because if it is not functioning properly, it will cause faulty transfers and trapped and broken bobbins, sometimes broken battery stands.

Skinner Reports on Performance of the Model 66 Foster-Muschamp Automatic Filling Winder

REVOLUTIONARY mechanical features of the Foster-Muschamp Model 66 automatic filling winder, according to the records of the initial installation at William Skinner & Sons, have drastically reduced operating cost in filling winding and subsequent operations. The newest machine in the Foster Machine Co. line, Model 66 is made in entirety at the Westfield, Mass., plant of Foster, the result of years of development by Foster in collaboration with Muschamp Textile Machinery Ltd. of Oldham, Lancashire, England.

Performance of the new Model 66 was demonstrated to the textile press and other guests at the Skinner plant in Holyoke, Mass., April 11. Those present were welcomed by W. C. Chisholm, Foster's president.

Development of the new Foster-Muschamp superspeed fully automatic fill winding machine, it is said, has made possible new techniques and quilling room standards far in advance of any heretofore found practicable. Many of the factors complicating fair time allowances for costing and planning have been eliminated, and it is now possible with Model 66 for a mill's planning department to project costs and operator efficiency with amazing accuracy. The operator can concentrate on maintenance of quality, without diverting attention to supervise tasks which now can be performed more accurately by mechanical means. Result is greater productivity per man-hour, accompanied by lower operating costs.

The new Model 66 maintains the highest quality and the lowest winding cost yet achieved, it is stated, by winding perfect bobbins having maximum yardage of constant density, perfectly wound bunches of pre-determined length, and no starting tail. The elimination of the starting tail is an important innovation, it is pointed out. It is accomplished

This end view of the Foster-Muschamp Model 66 shows motor drive.

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Charles C. Switzer, Vice President
TEXTILE SALES DIVISION
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GREENVILLE, SOUTH CAROLINA

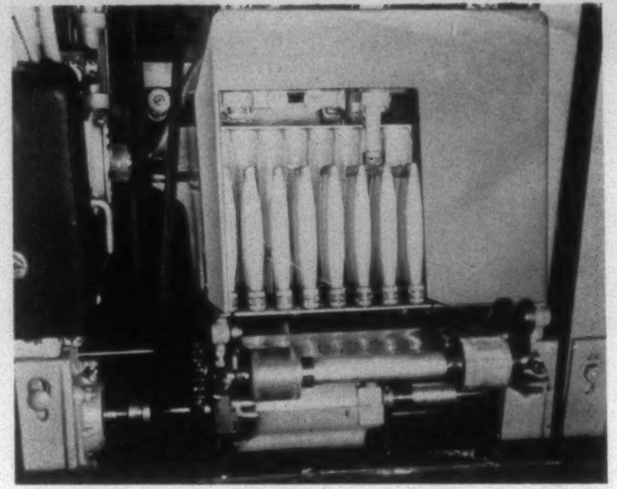
THE KEEVER STARCH CO. ★ GENERAL OFFICES ★ COLUMBUS 15, OHIO

Processors of corn, wheat and blended starches for industry since 1898 by an ingenious device which traps the yarn alongside of the driver during the transfer cycle. The end is then released during the first few revolutons, when the bobbin commences to wind, burying the end in the first few wraps of the bunch.

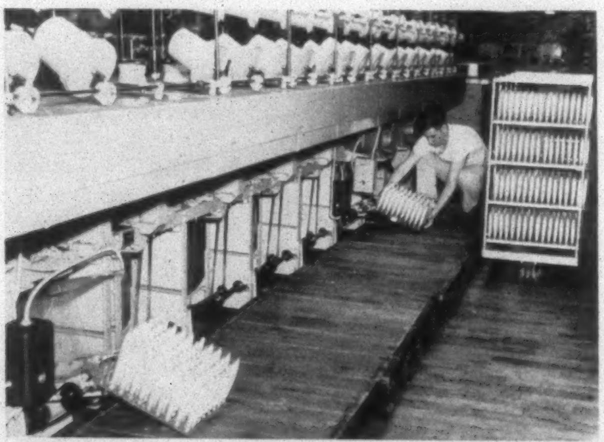
All of the aforementioned operations are done automatically, including the pinboarding of the bobbins, as demonstrated at the Skinner plant, except for replenishing the supply and piecing up occasional broken ends.

It was pointed out that the quality of the winding on the Foster-Muschamp Model 66 was excellent and that this quality was reflected in a reduction of filling defects in the cloth.

Figures were made available showing the production experience of William Skinner & Sons with the Foster-Muschamp Model 66. In this connection it was stated that allowances are easy to establish because each spindle on the Model 66 operates independently except for the drive; hence it is possible to determine a cycle of operations regardless of the fact that several different counts and colors may be running on the machine at the same time. For over-all cost comparisons, of course, it is necessary to compare identical data on preceding and subsequent operations, as well as on the winding operations.



Close-up of rear view, showing automatic loading of pinboard.



Bobbin boy picking up automatically-loaded pinboards at rear of machine.

The primary duty of an operator on the Model 66 is to creel in the supply; therefore, her task is confined to the number of supply packages she must handle in any given cycle, less allowances for interference (personal time, yarn breaks, cleaning, fatigue, etc.), all of which can be projected in a predetermined cycle with the exception of yarn breaks which occur at random. With a little study, however, normal frequency of yarn breaks can be determined and a factor can be established for this condition.

The time units given in the following table were estab-

Front view showing centralized bobbin hopper in foreground and automatic pinboarding attachments along front of Model 66.

lished by actual observations at William Skinner & Sons, and the figures confirmed by the ability of an average operator to meet the task assigned.

Specifications & Operator Duties
Actual Time
William Skinner & Sons
Foster-Muschamp Model 66, Spindle Speed 15,000 R.P.M.
Yarn 100/45/5T Bemberg—

Specifications

1. Lbs. per quill	.07
2. Lbs. per cone	3.8
3. Quills per cone	54
4. Yards per quill	3125
5. Winding time per quill including transfer (Mins.)	3.565
6. Lbs. per spindle hour 100%	1.176
7. Quills per spindle hour 100%	16.83
8. Lbs. per spindle week (40 hours)	47.04
9. End breaks per quill	.01

Tender Service Time in Minutes

10. Unwrap cones and place on creel deck	.12
11. Repair breaks	.12
12. Creel in supply	.28
13. Magazine pinboards	.08

Lost Machine Time per Spindle Hour in Minutes

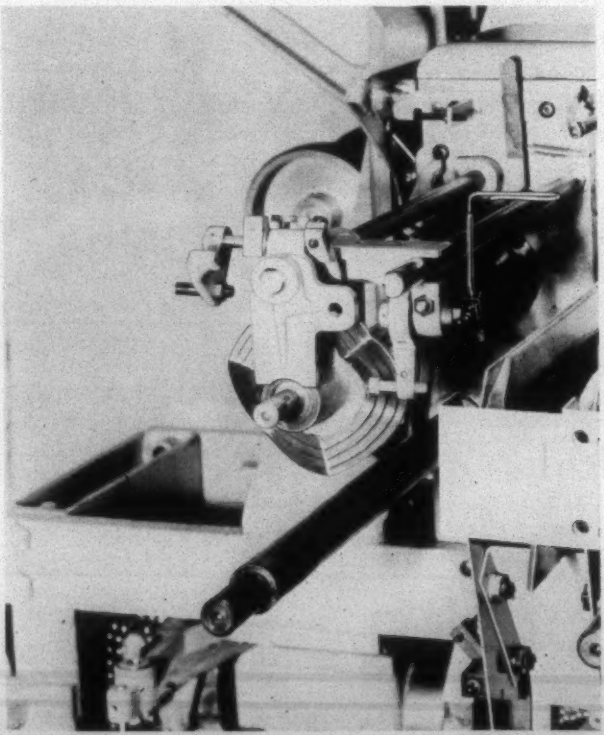
14. Average wait for end break service	3.54	
15. Fixing Time	.125	
16. Cleaning time	.0625	
17. Total	3.7275	
18. Machine Eff. (60 — line ÷ 60 =)		93.8%

Machine Time Per Quill in Minutes

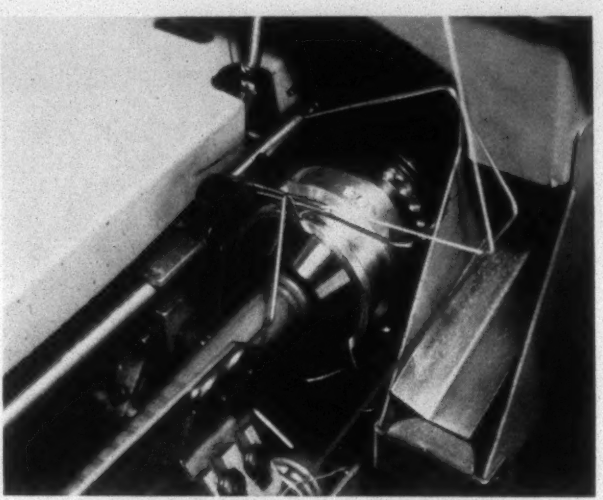
19. Winding time	3.465
20. Transfer time	.10
21. Service end breaks (line 9 × line 11)	.0012
22. Wait for end break service (line 9 — line 14)	.03465
23. Fixing time (line 15 ÷ line 7)	.007
24. Cleaning time (line 16 ÷ line 7)	.003
25. Total	3.61085
26. Net quills per spindle hour	16.61

Attendance Time per Spindle Hour in Minutes

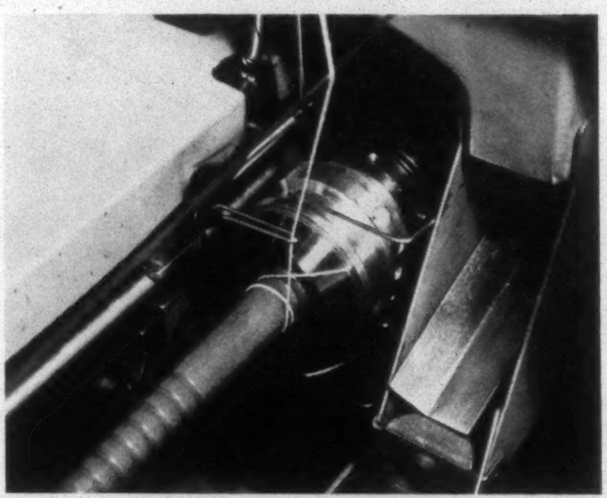
27. Service end breaks (line 26 × line 21)	.0199
28. Creeling (line 26 × line 12 ÷ line 3)	.086
29. Unwrap cones (line 26 × line 10 ÷ line 3)	.037
30. Magazine pinboards (line 26 × line 13 ÷ 80)	.0166
31. Cleaning time (line 16)	.0625
32. Total	.2220



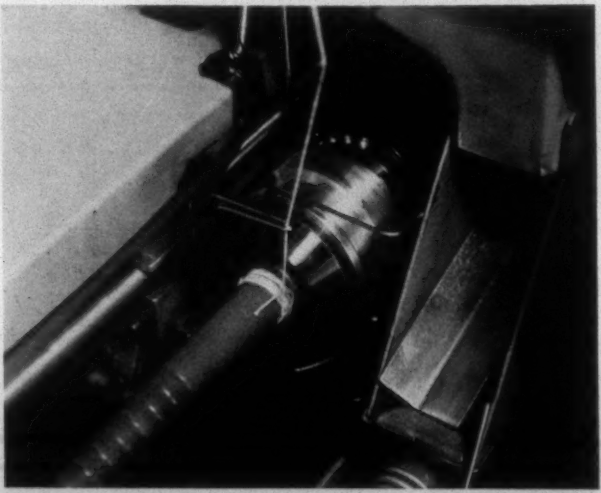
Close-up of uniquely designed exterior traverse and layer locking cam, cam follower and three tracks for the follower.



Drive 1, showing bobbin entering the drive.



Drive 2, commencing the wind.



Drive 3, tail released and secured under the first few wraps of the bunch.

33. Personal, idle and off job 15%	9
34. Proposed spindle assignment (51 ÷ line 32)	231
Weekly Production—40 Hours	
35. Quills per spindle (line 26 × 40)	664.40
36. Lbs. per spindle (line 1 × line 35)	46.50
37. Lbs. per tender (line 36 × line 34)	10,741.50
38. Tender rate—40 hours	$48.00
39. Cost per lbs. (line 38 ÷ line 37)	$0.00446

Summarizing, the foregoing figures show that the tender creeled in a 3.8-pound cone in .28 minutes and tied in one per cent breakbacks in .12 minutes each. Cleaning, other duties and personal time accounted for 9.0876 more minutes, adding up to a total service time of 9.1161 minutes per spindle hour. Based on the above duties an operator would in 40 hours handle 2,827 supply packages, tend 231 spindles at 93 per cent efficiency, and produce 10,741 pounds of 100-denier Bemberg per 40-hour shift. The current wage rate per 40 hours, divided by the pounds produced, gives a cost per pound of yarn quilled of $0.00446.

Loading magazine creel of Model 66. Note that cone holder swings back for easy donning and doffing.

Bleaching, Dyeing & Finishing

Reeves Coats Nylon, Offers a New Threat to King Cotton in the Tarpaulin Field

By RUTH G. FROST

COVERLIGHT is the name Reeves Bros. has given its lightweight neoprene-coated cloth that is designed to replace canvas as a tarpaulin fabric. So enthusiastic has been its reception by truckers and warehousing firms that a new industry has virtually arisen at Buena Vista, in the hills of Rock Bridge County, Virginia.

The plant at Buena Vista is known as the Duroflex Plant of the Vulcan Rubber Products Division, since Vulcan merged with Reeves three years ago. During the past two years, it has grown from a six-man shop into a modern multi-million dollar organization; and Coverlight has been one of the rubber-coated products made here that has been chiefly responsible for this development.

Among its unique qualities that has brought its rapid acceptance and recognition in industry are the facts that the nylon cloth coated with neoprene is waterproof, resists mildew and fungus and is exceedingly lightweight. In the past, tarpaulins have always been excessively heavy and bulky, usually requiring from two to five men to handle them. A Vulcan Coverlight tarpaulin can be handled by one man easily. This is an important feature for fleet operators with one-man trucks.

Usage and tests have shown that these neoprene-coated covers are acid and oil-resistant and withstand excessively high or low temperatures. Tests have proved that Coverlight won't shrink and will not become stiff or hard to handle when cold, or soft and gummy in a hot Summer sun. Because of the fabric construction, this synthetic fabric has been proved to have up to five times greater tear strength than ordinary tarpaulins.

Another important feature is the fact that the fabric is easily and quickly repaired when punctured, and repairs can even be made on the road by the driver in cases when a shipment is marked "rush."

The neoprene coating makes the nylon fabric impervious to sunlight or ozone effects. Another interesting feature is that the coating can be replaced by brush application to spots receiving most wear.

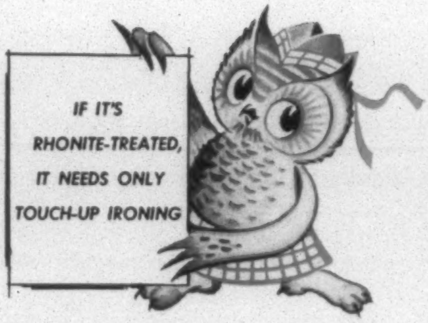
When the nylon fabric arrives at the Reeves Vulcan plant at Buena Vista it is examined and inspected for flaws before the coating process begins. As a prelude to coating, the cloth is joined in long rolls with aprons attached to each end. To insure the best possible adherence of the neoprene to the cloth, the fabric is thoroughly dryed by a heating process.

For lightweight fabrics the coating is applied by spreading. However, heavier materials are then sent through calender machines. After a dusting with talc, the "Vulcani-

their wrinkle resistance is the same with

RHONITE R-1

Ever see such look-alike dresses? But that's Rhonite R-1 for you . . . cottons, rayons, and blends wink at wrinkles with equal abandon whether it's the first wearing or last. One's a washer veteran, yet both dresses put on their partygoing look with the same quick swipe of an iron. Why are Rhonite R-1 finishes so durable? Perhaps because Rhonite R-1 is a modified urea formaldehyde, a monomeric product of such small molecular size that it penetrates and reacts inside the fibers.



Chemicals for Industry

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zation" or heating process takes place. Final steps include trimming the edges and the careful inspection process which includes sampling and lot testing.

Coverlight is available in various colors depending upon the industrial or military need. For example, the tarps can be made in black, aluminum, olive drab, orange yellow or sea blue. Colors are introduced as pigments in the coating compound before spreading takes place.

In addition to its use by the trucking industry, the fabric has an even wider potential, according to John E. Reeves, president of Reeves Bros. Use in aviation has an equally great future. It can be used to cover airplanes left out on the field. In fact, Coverlight's protective qualities have been described as "the next best thing to a hangar."

The fabric has also been recommended for use by the railroads handling freight since Coverlight has been found to have dimensional statibility and fits intricate patterns and forms to unusual shapes.

The introduction of this coated fabric has also prompted truckers to make greater use of open-top trailers which are cheaper to maintain and are more flexible for loading.

Canvas shop operators who feared complications would arise when working with the new coated fabric found that they needed no new equipment or additional personnel, but could use existing facilities, except of course, where increased demand for Coverlight made them expand their operation.

The Vulcan Rubber Products Division plant at Buena Vista, Va., is housed in a new, expansive one-story building that was recently completed. The plant is approximately 140,000 square feet and is situated adjoining the Norfolk and Western Railroad. It is also near the Chesapeake and Ohio track. Equipment in the plant is laid out for efficient flow of materials and employs about 350 people in various types of coating operations.

The Vulcan plant also turns out coated fabrics for life rafts, vests and exposure suits as well as blankets for high-speed offset printing.

Continuous Flow Range Combines With Modern Curer To Double Output, Provide Better Finishes At Less Cost

THE program of streamlining and modernization recently completed by Oxford (N. J.) Textile Finishing Co. is an outstanding example of the opportunities that exist for today's alert textile finishers.

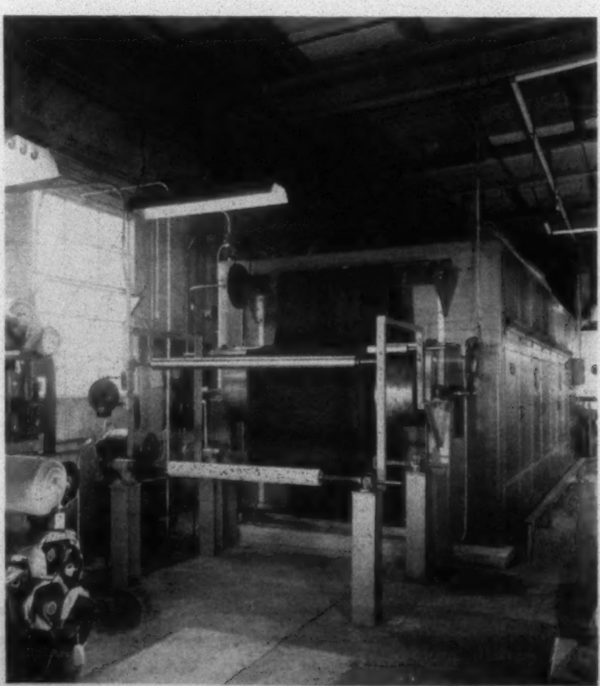
At Oxford, installation of a new Proctor roller curer, combined with the rearrangement of existing facilities, has resulted in 35 per cent higher cures with production increased from 50,000 to 105,000 yards per day—effectively doubled. In addition, Oxford reports that the new system enables the production of a wider range of better quality finishes. Cost savings are made also through reduction in labor, less waste, and more efficient chemical consumption.

The new curer occupies only 280 square feet of floor space, and is of the new W/M construction recently developed by Proctor & Schwartz Inc. W/M construction reduces installation costs, provides efficient, air-tight and well insulated housing—smooth, easy-to-clean surfaces. A Turbo fan offers improved air distribution which promotes even, controlled curing without shading.

Prior to installation of the new equipment, Oxford Textile Finishing faced a difficult problem. The bulk of Oxford's production was in the 50 to 60-pound class, largely gabardines and flannels, for crease-resistant, water-repellant outerwear. Because of changing consumer preferences, demand was swinging sharply toward finishes made with the new, highly-durable abrasion-resistant silicones and other thermosetting or thermoplastic synthetic resins. These new resins were not only relatively costly, but more difficult to apply and cure. Extra high temperatures, and critical processing factors taxed the ability of existing equipment.

Early attempts to obtain good cures were hampered by this inadequate equipment, excessive handling, due to the criss-cross flow pattern. Fig. 1 illustrates this complicated flow pattern as it existed at that time.

Difficulties were encountered at the three-ton padder whose pressures were insufficient for correct impregnation of the silicones into the fibers. At the next stage, an open burner tenter gave uneven drying, uncertain operating temperatures with 200°F. limit, and consequent low speeds. Replacement of the Palmer blanket rolls alone amounted to $8,900 annually. The use of these blankets has been entirely eliminated. Two passes were required in the loop dryer, one for drying and one for curing. These passes and repasses were not only time consuming and costly, but inter-



Installation view of Proctor roller curer, showing delivery end.

J. W. Knapik is pictured as he checks controlled finishes.

fered with the normal flow of other goods coming from the dyehouse to be dried. Finally, the much-handled cloth had to be framed out with steam to restore the width lost in the dryer. The maximum output of this old system was 50,000 yards per 24 hours, and the existing arrangement was economically unsound and drastic action had to be taken.

The new simple, straight-line continuous flow pattern is illustrated in Fig. 2. Beginning with a ten-ton padder to secure proper impregnation, the fabric moves through squeeze rolls and preheater to a clip tenter frame where it is dried on one pass. Continuing its straight-line flow, the cloth then moves to a Proctor roller curer. The new curer assures uniform curing through uniform air circulation and dual heating stages, which can be pre-set. Motors are synchronized to maintain curing speed, and tension of the fabric can be adjusted from minimum to maximum while the machine is in operation according to the requirements of the fabric being cured. In the Proctor roller curer alternate top rollers are powered by shaded pole motors to convey the cloth with controlled minimum tension through the curing stage.

According to J. W. Knapik, chief of operations for

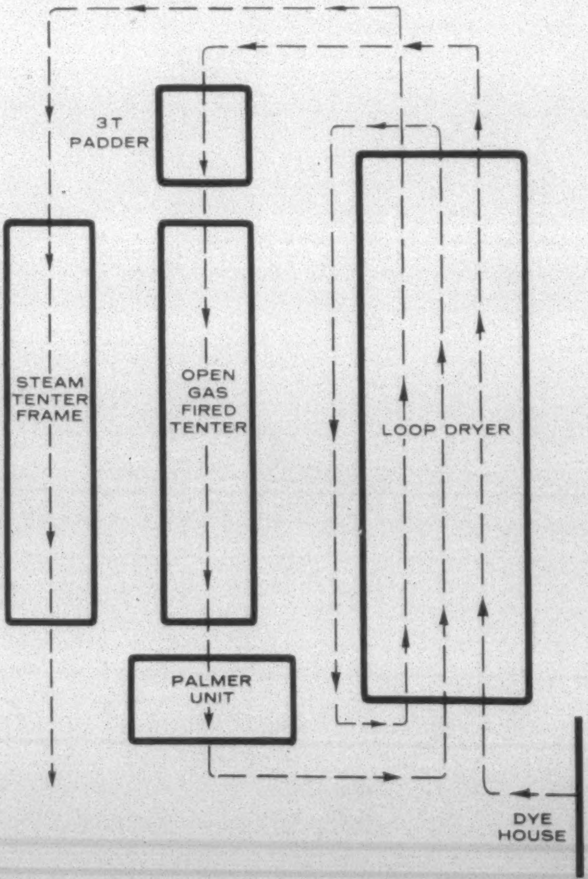
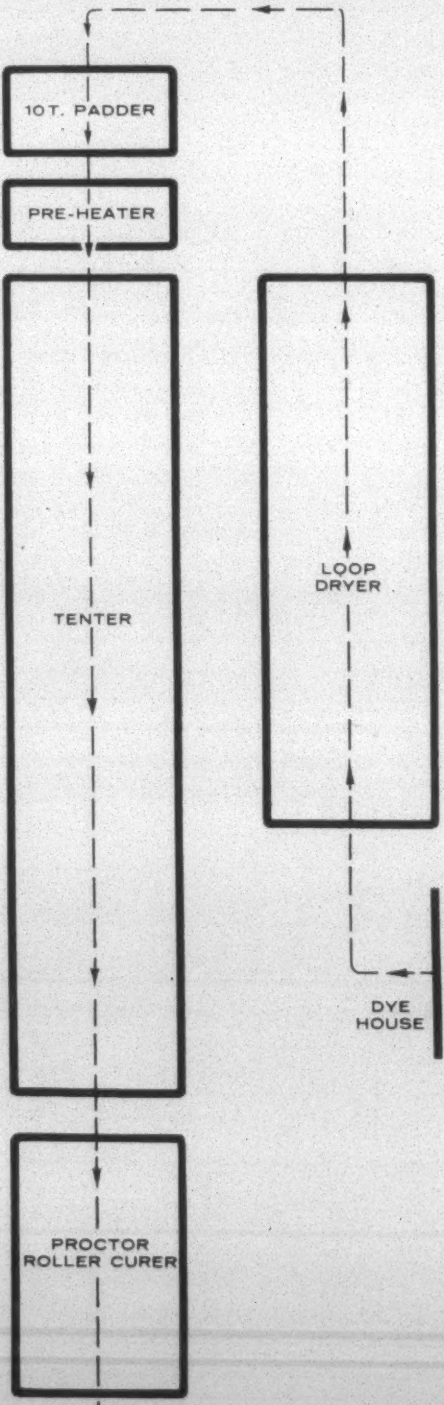


Fig 1 *(above)* shows the old flow pattern of goods at Oxford Textile Finishing Co. The new and simplified flow pattern is illustrated in Fig. 2 *(right)*.



Oxford Textile Finishing Co., experience is an important factor in obtaining a good cure, and equipment must have the versatility and flexibility to respond quickly in control as dictated by the fabric's mill variations, moisture content, etc.

Mr. Knapik also states the roller curer produces 85 to 95 per cent cures, which compares to only 70 per cent as an industry average. This maximum cure means that there are no uncured resins in the fabric, again saving handling costs, as well as producing a higher grade fabric.

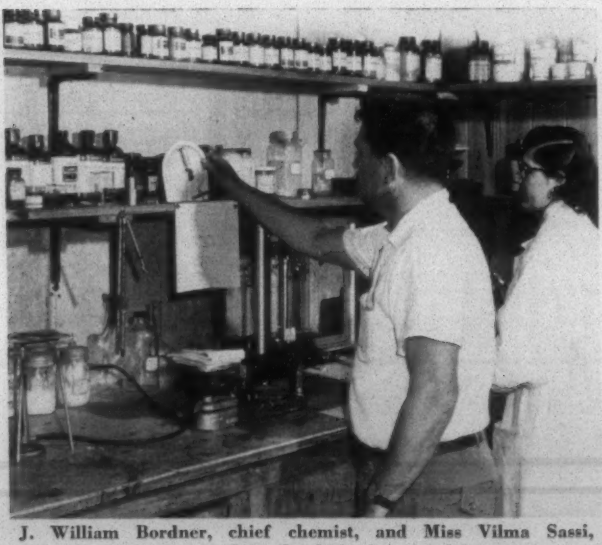
Average running speeds on the new curing line average 35,000 yards per shift, or 100,000 to 105,000 yards per 24 hours, with peaks sometimes reaching as high as 113,000 yards. This is not only twice as fast as the previous method, but the entire finishing operation can be handled by a considerably reduced labor force. The new equipment will more than repay the initial investment in a remarkably short period.

An important adjunct to this high-speed finishing line is Oxford's quality control system. Tests with laboratory accuracy must be performed and results posted quickly. Delay in test results could mean thousands of dollars waste in short periods. Tests include wrinkle recovery, water repellancy, wash, odor and many others.

Peter B. Fiory, president of Oxford, has stated "Today's consumer is getting a better grade of fabrics than ever before in the durable, crease-resistant and water-repellant field." The consumer demand for quality fabric requires finishers to supply a top quality finish produced as efficiently as possible.

Credit for these improvements goes to Mr. Knapik, with the close co-operation of Proctor & Schwartz Inc. Mr. Knapik's understanding of each detail of the operation at Oxford, his knowledge of the advantages and performance of new equipment available in his field, and the ingenuity of their application, are credited with making these cost savings possible.

As a result of these improved qualities and more uniform finishes, John Gambino, secretary of the corporation, and in charge of sales, stated that as a result of increased customer confidence in the quality of the finished product, sales have more than doubled since the plant modernization has taken place.



J. William Bordner, chief chemist, and Miss Vilma Sassi, assistant chemist, at work in the Oxford testing laboratory.

The Oxford Textile Finishing Company has been in its present location for almost a decade, and numbers 155 employees. The plant also utilizes what is perhaps the only "opening machine" of its type in the industry. Designed by Mr. Knapik, the machine has reduced the labor required to open cloth after dyeing by 75 per cent. The results of these modernization efforts have made Oxford extremely conscious of the new techniques offered, and even now Oxford is planning new ways to improve its finishing operations.

Nylon Tarpaulins To Replace Cotton Duck

Coated nylon truck tarpaulins will eventually replace cotton duck, according to Paul F. Tuerk, president of Aero Canvas Products, Indianapolis, Ind., who adds that more than half of Aero's tarpaulin production is being specified in coated nylon by truck operators. He made these statements recently before a meeting of representatives of the coated fabrics department of United States Rubber Co. at South Bend, Ind.

Mr. Tuerk pointed out that the tarpaulin industry had gone through a period of experimentation with many different types of fabrics, coatings and fabrication methods during the past few years. He said that improper fabrication techniques had been responsible for most of the failures, and that all seams, to be properly made, should be of six-ply, lock-stitch type sewing and correctly sealed. Vinyl-coated U. S. Fiberthin center sections with neoprene-coated front and back sections make the most serviceable tarpaulins, according to Mr. Tuerk's experience.

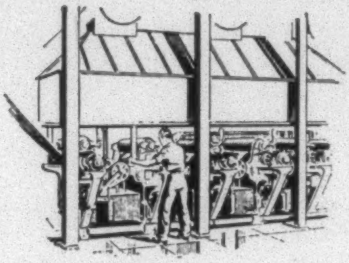
More Emphasis To Be Placed On Color

"In 1956, color will be a greater design, production—and cost—factor than ever before," according to an article on color problems in a recent issue of *Industrial Design Magazine*. The article, the first to discuss color from the viewpoint of application to product design, describes how colorants are developed and manufactured using the organic chemicals and pigments divisions of American Cyanamid Co. as a case history. By tracing the story of a unique family of vat dyes developed by Cyanamid, the complexities of the chemical research involved in the development of a colorant are explained.

"As many as 1,000 tests may be made on a single dye before it reaches the market," the article reports. "If a dye falls down on any one of these tests, no one outside the laboratory ever sees the dye. Today virtually all modern dyes and pigments are synthetic, many of them prepared from coal tar. By a series of intricate steps, one group of atoms after another is built into the molecular structure. Each such change modifies the way the light is absorbed. Each grouping of atoms has its own unique set of color frequencies to which it responds. When a suitable structure has been created, a product with the first requirement of a pigment or a dye results—color."

Cost factors, application testing and color standardization are also discussed. "Color standards," the article states, "begin with the colorant maker, who must exercise rigid controls in order to match any two batches of material, and continues through many steps of fabrication until the colored product is put to use by the consumer."

machinery...
for DYEING and FINISHING



COMER-HAMILTON MACHINERY CORP. has recently been organized to offer the same quality of service to wet processing plants that Ben Comer Jr. and Don Hamilton have been providing through their respective Comer Machinery Co. of Atlanta, Ga., and Cotton Mill Machinery Co. of Charlotte, N. C.

Your inquiries as to needs and disposals are solicited.

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Maintenance, Engineering & Handling

Some Tips for Getting Longer Belt Life

ARE you getting maximum wear out of your belts? The more you know about them the longer you can make them last, so check your present belt practices against the following suggestions made by Newell Perry, belting engineer for the Thermoid Co. of Trenton, N. J.

(1) *Select proper belt*—choose a belt that is designed for the materials to be carried, temperatures encountered and tension required.

(2) *Design supporting structure carefully*—check diameter of pulleys, spacing of idlers, take-up mechanism, loadpoint.

(3) *Correct storage*—if the belt is not installed at once, store it out of the sunlight, away from hot pipes, stoves, radiators.

(4) *Avoid handling damage*—when received from the manufacturer, don't drop a heavy roll of belt off a truck or railroad car—skid, roll or lift it.

(5) *Plan installation*—threading of belt over idlers and pulleys is critical. Avoid bending belt sharply. Take care not to drag over sharp, rough surfaces. Before belt is run, check for tools left accidentally on return side.

(6) *Check belt alignment*—supporting structure should be aligned with a transit. Misalignment causes crooked running and edge wear.

(7) *Strive for ideal loading*—material should be loaded on belt in the same direction and at same speed, as belt travels. Load middle of belt, not sides.

(8) *Avoid impacts from lumps*—load hard lumpy material on top of fines, wherever possible. Use finger bars or chain baffles to reduce velocity of lumps at loading point. Direct load to strike belt between idlers, if possible. Keep distance from chute to belt at a minimum.

(9) *Use impact idlers*—in extreme cases such as larger rock lumps, load over rubber-covered or pneumatic idlers to reduce hammer-anvil effect on belt, which causes ruptures.

(10) *Design rugged loading chute*—loading chute should be permanent, strong, securely fastened device. Avoid jerry-built, "baling-wire" contrivance which may loosen and drag on belt.

(11) *Guide material with skirt boards*—skirt boards should not touch belt. Distance between belt and board should increase in direction of travel so wedged-in lumps will free themselves.

(12) *Fix responsibility for belt maintenance*—assign a "belt-boss" to check belt, make repairs and adjustments.

(13) *Inspect belt on schedule*—"belt boss" discovers small rips, tears, worn spots before real damage can be done and pays particular attention to splices.

(14) *Maintain belt repair kit*—tools, splicing fasteners, rubber cement, patching rubber, rip plates should be ready at all times for making belt repairs, at once, as soon as discovered.

(15) *Cover return side with deck*—keep spilled material off return side, with metal or wooden decking to prevent lumps from running between belt and terminal pulley. Brushes or scrapers are beneficial.

(16) *Cover belts*—a metal or wooden cover will protect belts installed outdoors against sun and against weather.

(17) *Keep cost records*—continuous records of maintenance and repair costs against tonnage carried will indicate service quality.

(18) *Lubricate wisely*—check idlers regularly for adequate grease but avoid excess grease which will smear belt and shorten life.

(19) *Interconnect conveyors*—provides means of automatically shutting off preceding belts in a series to prevent pile-ups of material if a following conveyor stops.

(20) *Develop belt safety rules*—provide guards around drives, prohibit personnel from riding on belt, install frequent shut-off switches, equip belt for harmless discharge of static electricity, control dust at transfer points with exhaust hoods, etc.

Replacement of V-Belts

When multiple V-belts are replaced because of wear, several points should be observed to obtain good service from the replacement belts. Normally the original belts are selected and, in some cases, installed by the original manufacturer in sets matched for equal length.

When the belts have served their expected life, the sheaves or pulleys will be from one-half to fully worn out, also. All too often, the new replacement belts are installed on badly and unevenly worn pulleys which will drastically reduce the life expectancy of the replacement belts. The best practice is to replace the pulleys when the belts are replaced. In any case, the pulleys should be examined for roughness in the grooves which will cause excessive wear.

The grooves should also be checked for uneven wear. The belts may be matched but not the grooves. To check for uneven groove wear, move the matched belts from groove to groove and test for difference in play. If uneven tension is observed, the pulleys should be replaced. The replacement belts should be of the same type and construction as the original. Large belt users holding many belts in inventory should also be careful to use belts with approximately the same storage life under the same storage conditions to obtain matched sets as well as observing the match marks.

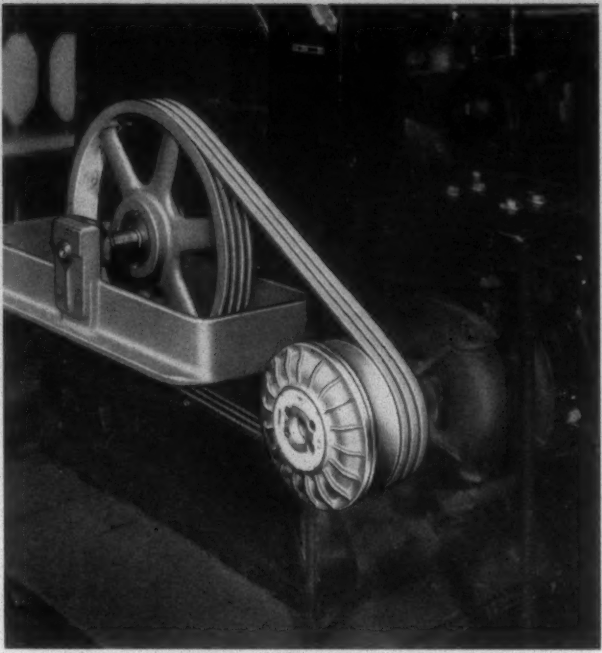
Two Plants Lick Tramp Iron Problem

THE fact that the ever-present threat of machinery damage and fires posed by the infiltration of tramp iron into textile mills is neither very difficult nor very costly to overcome is quite impressively demonstrated by the parallel experiences of two Southern plants, Oakdale Cotton Mills, Jamestown, N. C., and the non-woven fabric plant of Chicopee Mfg. Corp. at North Little Rock, Ark. Although the materials handled by these mills differ considerably, both announce entirely satisfactory results following installations of Eriez Hi-Powr non-electric permanent magnetic separators.

At the Oakdale mills, four 34-inch Eriez plate separators have been installed completely across the passageway immediately following the kick-off apron roll of the plant's four blending feeders handling cotton and reworked cotton waste. The magnets are picking up iron and steel particles originating in this material, as well as an occasional broken part from the feeders themselves, and are protecting all of the mill's cleaning and opening equipment. L. M. Hodgin, secretary of Oakdale, reports "the Eriez separators have proved 100 per cent effective to date; shutdowns due to machinery damage and fire caused by tramp iron have been eliminated."

In the case of Chicopee Mfg., manufacturer of some 250 types of non-woven fabrics, the installation consists of two 38-inch and one 43-inch Eriez permanent non-electric magnetic plate separators, one each above the spiked aprons of three pickers handling absorbent cotton, rayon, nylon and card returns. The magnets are removing wire, nails and a wide assortment of similar small ferrous objects originating in the materials, and are effectively protecting the mill's pickers, cards and special processing equipment. According to R. E. Hall of Chicopee's engineering department the magnets have already saved thousands of dollars in the machinery damage, and have eliminated production delays due to such damage and to fires.

This is one of three Eriez Hi-Powr permanent non-electric plate magnets installed on each Kitson single-process, two-beater picker at the Chicopee Mfg. Corp. non-woven fabrics division plant in North Little Rock, Ark. Visking, manufacturers of 250 types of non-woven fabrics, finds that these magnetic separators save them about $5,000 annually by removing such ferrous contamination as wires, nails, bottle caps, bolts and bale ties before this tramp iron can cause severe damage to the pickers, cards and special processing equipment.



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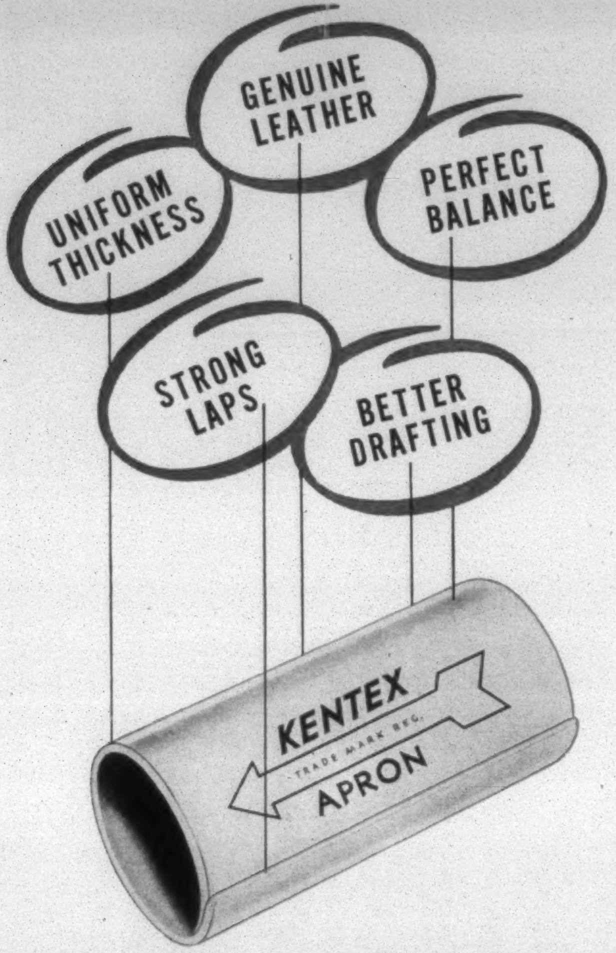

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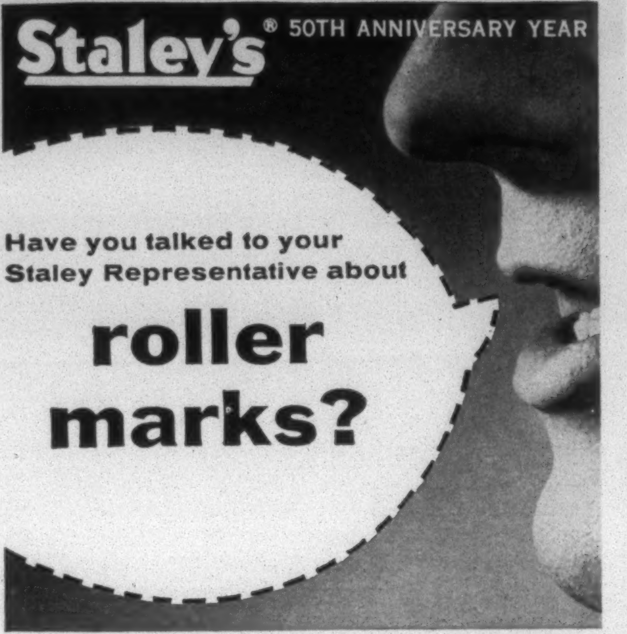
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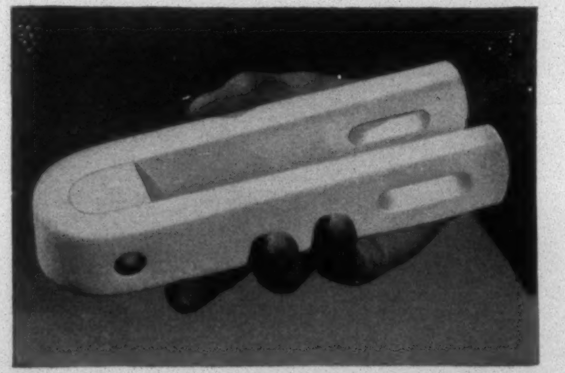

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PERSONAL NEWS

J. A. Chapman Sr.

James A. Chapman Sr., president and treasurer of Inman (S. C.) Mills and Riverdale Mills, Enoree, S. C., will be awarded an honorary Doctor of Laws degree by Wofford College, Spartanburg, S. C., at the school's commencement exercises June 4. Mr. Chapman, a native of Middlesboro, Ky., attended Cornell University after graduation from Wofford in 1913. He joined Inman Mills shortly after graduation from Cornell and rose through successive positions to the presidency of the firm. An outstanding Presbyterian and a Spartanburg civic leader, Mr. Chapman has served as a trustee of Presbyterian College and of Wofford and has been one of the leaders of Wofford's 100th Anniversary Development Program. The city of Inman has honored him for his interest in education by naming the city's new high school Chapman High. Through Inman Mills Foundation, he has established 16 continuing scholarships to Clemson and Winthrop Colleges. A former president of the South Carolina Textile Manufacturers Association and of the Southern Textile Association, Mr. Chapman is currently a director of the American Cotton Manufacturers Institute.

Summey M. Cauble Jr. has joined Textiles Inc., Gastonia, N. C., as superintendent of the company's Arlington Plant. Mr. Cauble was formerly assistant general manager of Valdese (N. C.) Mfg. Co.

Harvey W. Moore, president of Brown Mfg. Co., Concord, N. C., cotton dress goods producer, has been elected a director of Cannon Mills Co., Kannapolis, N. C. Cannon recently acquired operating control of Brown.

P. S. Leach, superintendent of the Lynchburg (Va.) Division of Consolidated Textile Co. Inc., has been named to succeed Henry B. Miller, deceased, as manager of the division. Mr. Leach, a native of Newnan, Ga., received his B. S. degree in engineering from Georgia Tech in 1932, and an M. S. degree from Illinois University in 1948. After working with Bibb Mfg. Co., Dan River Mills and the technical division of the U. S. Conciliation Service, he joined Consolidated Textile in 1948 as head of the industrial engineering department. He was promoted to assistant superintendent in 1951, and to plant superintendent in 1954. He is a member of the board of governors of the Southern Textile Association, and a former member of the board of governors, Textile Quality Control Association.

William H. Woolbright has been promoted from the standards department to personnel director of the Haynsworth Plant of Woodside Mills, Anderson, S. C. Succeeding Mr. Woolbright in the standards department is E. J. Washington.

William F. Luther

William F. Luther has resigned as director of research at Dixie Mercerizing Co., Chattanooga, Tenn., and has joined Marler Chemical Co., Cleveland, Tenn., as technical director. Dr. Luther, who is the present chairman of the South Central Section of the American Association of Textile Chemists & Colorists, has also resigned as head of the textile division of the Industrial Research Institute of the University of Chattanooga. In addition to his work in the A.A.T.C.C., Dr. Luther is an active member of several other technical and professional organizations. He is the author of several U. S. and foreign patents as well as numerous articles for trade magazines.

William P. Crawley has been appointed supervising textile engineer to establish and operate a textile plant for The Carborundum Co., Niagara Falls, N. Y. The new plant will manufacture high heat-resistant Fiberfrax fiber in roving, yarn, rope, fabric and tape forms. In his capacity as textile engineer, Mr. Crawley will also serve in technical sales activities. Mr. Crawley was formerly with American Viscose Corp., Marcus Hook, Pa., where he was head of the yarn processing and weaving division of the textile research department. He is a graduate of the School of Textiles, N. C. State College, Raleigh.

Howard C. Greer and Arthur W. Lucas have been elected vice-president of finance and treasurer, respectively, of The Chemstrand Corp. Prior to their promotions, Mr. Greer had served as treasurer and Mr. Lucas as assistant treasurer. Mr. Greer has been with the company since July 1950. Mr. Lucas joined the firm in June 1951. . . . F. William Koster has been appointed manager of control practices for the corporation's production departments. Mr. Koster, as plant manager, started the Chemstrand Acrilan acrylic fiber plant in 1952. He was assistant director of research for American Viscose Corp., Marcus Hook, Pa., for six years. Prior to that he was chief chemist and director of research of the acetate division of Avisco at Meadville, Pa., and for 12 years a research chemist, planning engineer and production supervisor with the Du Pont Co. . . . Dr. Kenneth Johnson, assistant plant manager, succeeds Mr. Koster as manager of the Acrilan plant.

Edward A. Werner, former president of Robbins Mills, has been admitted as a general partner of Henry Herrman & Co., members of the New York Stock Exchange. Mr. Werner served as president of Robbins from 1949 until his resignation in 1952.

Hugh W. Causey, manager of the Charlotte, N. C., sales branch of Solvay Process Division, Allied Chemical & Dye Corp., has been named an assistant director of sales for the company. Mr. Causey, a native of South Carolina, joined Solvay in 1937 as a salesman assigned to the Charlotte branch. He became assistant manager of the office in 1948 and was appointed manager three years later. In his new position, Mr. Causey will make his headquarters in New York City. . . . Named to succeed Mr. Causey as head of the Charlotte office is Robert P. Baynard. Mr. Baynard, a graduate of The Citadel, has been a salesman at the Charlotte office since 1948.

Walton V. Byers and Harry B. Patterson have been appointed sales agents for Whitin Machine Works and have been assigned to the company's Charlotte, N. C., office. Mr. Byers, a native of Ashville, Ala., received his early textile training at Dwight Mfg. Co., Alabama City, Ala., where he became supervisor of carding. From 1923 to 1955 he was connected with Erwin Mills Inc. as assistant superintendent, superintendent, assistant manager and manager of various mills in the Erwin chain. . . . Mr. Patterson is a native of Athens, Tex., and a graduate of Texas Technological College. He has worked as overseer of carding at Highland

Walter V. Byers, Harry B. Patterson

Park Mfg. Co., Charlotte, and as production planner, overseer of warping and overseer of spinning at Abbeville (S. C.) Mills Corp. . . . E. Kent Swift Jr., director of research for the company, and John H. Bolton Jr., manager of sales and development for the American System Division since 1953, have been promoted to vice-presidencies. Mr. Bolton is also assistant treasurer of the company, and Mr. Swift has been a director since last year.

Harrison C. Givens Jr., former manager of the manufacturing department, textile division, Celanese Corp. of America, has been made vice-president-operations of Celanese International Corp. In his new capacity, Mr. Givens will be responsible for providing continuing liaison between Canadian Chemical & Cellulose Co. Ltd., the Celanese affiliate in Canada, and Celanese Corp. of America. Mr. Givens joined Celanese in 1933.

Feaster Newton, formerly assistant superintendent of the Olympia Plant of Pacific Mills, Columbia, S. C., is now superintendent of Osage Mfg. Co., Bessemer City, N. C.

Malcolm Campbell, dean of the School of Textiles, North Carolina State College, Raleigh, is currently in Peru as a representative of the International Co-Operation Administration. Dean Campbell will spend several weeks there studying and advising about operation of a school of textiles which is being developed at the Peruvian National University of Engineers.

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F. Neal Houston

F. Neal Houston of Greenville, S. C., has been named sales representative for the Textile Specialty Co. of Greensboro, N. C. Mr. Houston will cover South Carolina and part of North Carolina for the company. He is a 1950 graduate of N. C. State College, and has been in textile sales since graduation.

William Ockrant, for 20 years controlling stockholder of Railway Supply & Mfg. Co., Charlotte, N. C., has withdrawn from that firm and has established William Ockrant Corp. to deal in textile waste fibers. The new corporation will make its headquarters at 1609 North Brevard Street, Charlotte.

Earle R. Stall Jr., formerly assistant plant manager of American Spinning, Greenville, S. C., division of Cone Mills Corp., has been appointed plant manager. Mr. Stall succeeds Walter W. Rogers, who has retired under the corporation's retirement plan.

William B. Chambley Jr. has been named foreman of carding and spinning at the Towel Mill of Fieldcrest Mills Inc., Fieldale, Va. Mr. Chambley succeeds Charles B. Harper, who has resigned. He was formerly spinning superintendent of John P. King Mfg. Co., Augusta, Ga. Prior to that he was foreman of carding and spinning for the Graniteville (S. C.) Co., and a supervisor at the Eagle & Phenix Division of the Fairforest Co., Columbus, Ga. He is a native of Columbus.

W. F. Leineweber Jr., vice-president and general manager of W. D. Dodenhoff Co. Inc., Greenville, S. C., textile machinery and supply manufacturer, has been elected president of the company. He succeeds Mrs. W. D. Dodenhoff, who becomes board chairman and treasurer. Other officers named include Carl Baker, vice-president in charge of industrial sales; A. V. Moody, vice-president in charge of machinery sales; and H. C. Hard, secretary.

Graydon Robinson, general superintendent of Lebanon (Tenn.) Woolen Mills, has been named a vice-president of the company. Mr. Robinson is also a member of the firm's board of directors. . . . Charles H. Baird, production manager for the past several years, has been promoted to general manager. . . . Leonard Ballard, assistant secretary, has been named secretary.

Harold Ackerman has been elected president of The Virginia Woolen Co., Winchester, Va., following a meeting of stockholders of Virginia and officials of United Merchants & Manufacturers. A. D. Juilliard & Co. Inc., a subsidiary of U. M. & M., acquired control of Virginia Woolen recently. Mr. Ackerman is president of Juilliard. Three vice-presidents have also been named. They are F. I. Largent Jr., William H. Mellor Jr. and Al Bleiman. Messrs. Largent and Mellor were in the same capacity for Virginia Woolen prior to the acquisition. Mr. Bleiman also holds a vice-presidency with Juilliard.

E. H. Hance, formerly overseer of dyeing at the finishing plant of Excelsior Mills, Pendleton, S. C., has been transferred to the firm's plant at Union, S. C., as superintendent of dyeing and finishing.

M. J. Dick, office manager and a director of Opp Cotton Mills and Micolas Cotton Mills, Opp, Ala., has been named assistant secretary of the two mills. . . . Ray Jeffcoat, plant engineer, has been promoted to assistant superintendent.

John B. Bashaw of J. L. Stifel & Sons, dyers and finishers, Wheeling, W. Va., has been elected president of the Wheeling Rotary Club for one year. Mr. Bashaw, before joining Stifel, was with Aspinook Corp., Jewett City, Conn., and U. S. Finishing Co., Providence, R. I.

Francis D. Hand, plant controller and office manager of the Lindale, Ga., division of Pepperell Mfg. Co., has been elected president of the Chamber of Commerce of Rome and Floyd Counties. Mr. Hand has been with Pepperell since 1927.

Roger Milliken, president of Deering, Milliken Co., Spartanburg, S. C., and Stanley W. Converse, president of Clifton (S. C.) Mfg. Co., have been elected new directors of the Spartanburg Chamber of Commerce. Their terms will end in 1959.

S. T. Whittier II

Stephen T. Whittier II has joined the staff of Saco-Lowell Shops as assistant to A. K. Landau in the sales-research department. Mr. Whittier, formerly with Pneumafil Corp., Charlotte, N. C., is a graduate of Williams College. He will make his headquarters at the Boston, Mass., office of Saco-Lowell Shops.

Three promotions have been announced in the cotton mill division of Riegel Textile Corp., Ware Shoals, S. C. William E. Ashley, assistant night superintendent, has been named assistant superintendent, succeeding W. P. Johnson, retired. . . . Ernest Greer has been promoted to assistant night superintendent. He was formerly weaving overseer. . . . Herman B. Medlock has been named overseer of weaving, succeeding Mr. Greer.

Dr. Ralph F. Nickerson of Everett, Mass., has been transferred from the research department of the inorganic chemicals division of the Monsanto Chemical Co. to the Shawinigan Resins Corp. at Springfield, Mass. Dr. Harry Teicher of Everett has been promoted to group leader of the silica products group succeeding Dr. Nickerson. A native of Massachusetts, Dr. Nickerson joined Monsanto in 1946 as a research chemist in the textile laboratory for the company's former Merrimac Division. He became a group leader in 1949. With Shawinigan Resins, an associated company of Monsanto, he will return to research in the field of cellulose chemistry. Dr. Teicher, a native of New York City, joined Monsanto at Mound Laboratory, Miamisburg, Ohio, in 1953 and was transferred to the inorganic chemicals division research department in 1954.

Rupert Melton

Rupert Melton has joined the sales division of Pneumafil Corp., Charlotte, N. C., as product manager. He will specialize in the company's central air and central materials recovery systems. An engineering graduate of Virginia Polytechnic Institute, Mr. Melton has been actively engaged in industrial air conditioning with Buensod-Stacey for a number of years, having recently managed that firm's Richmond, Va., office.

Harold P. Duncan, superintendent of the Hannah Pickett Plant of J. P. Stevens & Co. Inc., Rockingham, N. C., has been transferred to Milledgeville, Ga., where he will manage the operation of the Stevens plant there. Mr. Duncan had been superintendent of Hannah Pickett for about five years. Prior to that he was with Stevens at Milledgeville. Succeeding Mr. Duncan at Hannah Pickett is George A. Browder, former assistant superintendent.

Ralph Tanner has been elected a director of Anderson & Cairns Inc., New York City advertising agency. Mr. Tanner, a well-known figure in both advertising and textile industry circles, was with John A. Cairns Co., now Anderson & Cairns, for five years before he left to join one of the agency's accounts, Mooresville (N. C.) Mills, as advertising and sales promotion manager, and later as vice-president and director in charge of sales and production co-ordination. He recently returned to the agency field as vice-president and account executive at Anderson & Cairns from Sunbury Textile Mills Inc., where he was a director and vice-president in charge of sales.

H. F. Schweitzer has been named Charlotte, N .C., district manager for the industrial products division of the Goodyear Tire & Rubber Co. He had been a field representative for the company at Chicago, Ill. Mr. Schweitzer joined Goodyear in 1947 as a sales trainee. He was transferred to St. Louis, Mo., the same year as an industrial products clerk, and was promoted to field representative for the division at Chicago in 1949. Mr. Schweitzer replaces R. J. Ario at Charlotte. Mr. Ario was promoted to manager of the division's Cleveland, Ohio, district recently.

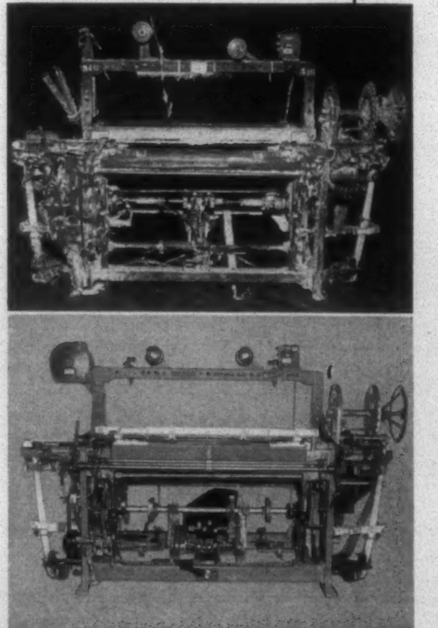
Harrison C. Blankmeyer has been appointed manager of the research laboratory of the textile products division of Owens-Corning Fiberglas Corp. In his new position, Mr. Blankmeyer will supervise efforts directed toward developing new Fiberglas textile products and processes and improving existing ones. He will be headquartered at Owens-Corning's textile laboratories at Ashton, R. I. Mr. Blankmeyer formerly was technical director of Owens-Corning's research division at Newark, Ohio. He joined the company in 1952.

William T. Burgin has been appointed New York district sales manager of the textile fibers department of Carbide and Carbon Chemicals Co., a division of Union Carbide, producers of Dynel acrylic fiber. Mr. Burgin succeeds John S. McGilly, who was named assistant sales manager of the fibers department last May. A textile engineering graduate of North Carolina State College in 1923, Mr. Burgin was formerly associated with Virginia-Carolina Chemical Corp. as manager of the New England district. Previous to that he had been with Robbins Mills as a department manager, and with Southeastern Cottons in charge of the converting operation.

William F. Dolan has been selected to receive the 1955-56 Phi Psi Award which is presented annually to an outstanding senior majoring in textile technology at the Alabama Polytechnic Institute. Based on scholastic standing, leadership, initiative, personality, loyalty and courtesy, the award is granted by the Harrison, N. J., chapter of Phi Psi, the national textile honorary fraternity. A former resident of Cedartown, Ga., Mr. Dolan received a B. S. degree in textile technology from the Alabama Polytechnic Institute in December 1955. He is now undergoing a course of training with the Nopco Chemical Co., Harrison, N. J., preparatory to becoming a sales representative for the textile chemicals division of the company. The award ceremony will take place at a meeting of the Alabama Operating Textile Executives Association, to be held at the Alabama Polytechnic Institute, Auburn, Ala., on April 28.

E. Rabun Swint has been appointed manager of the executive development for the dyestuff and chemical division of General Aniline & Film Corp. Creation of the new post is said to be in line with a long-range executive development program and the expanding operations of the division. The expansion program includes the recently opened high pressure acetylene products plant at Calvert City, Ky., and a new surfactant manufacturing building under construction there; at Linden, N. J., an expanded surfactant facilities, a newly-completed chlorine-caustic plant and a new ethylene oxide plant are to be built. Mr. Swint will be responsible for the development of an executive management group and staff for these new operations. He joined General Aniline in 1953 as personnel relations manager of the company's Linden dyestuff and chemical plant.

Michael F. Kopec, plant superintendent of the Luray, Va., textile division of The Schwarzenbach Huber Co. since 1951, has been named general manager of the division. Mr. Kopec, who originally joined the Schwarzenbach firm as plant superintendent in Altoona, Pa., in 1943, has been in the textile business throughout his career. He came to Schwarzenbach after many years with The Duplan Corp., with which he



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held positions of increasing responsibility in plants in Virginia and Pennsylvania. In 1946 he resigned from Schwarzenbach to become plant superintendent of the Easton, Pa., plant of Chipman Knitting Mills. In 1951 he rejoined Schwarzenbach, assuming the position he has held until being named to his new post.

Robert H. Smith

Robert H. Smith has joined the Southern sales staff of Amalgamated Chemical Corp., Philadelphia, Pa., manufacturer of textile chemicals and finishing agents. Mr. Smith was formerly sales technician for the High Point (N. C.) Chemical Corp. He will cover the Carolinas and Virginia for Amalgamated, making his headquarters in Greensboro, N. C.

Alonzo Cowsert has been appointed manager of the San Angelo, Tex., wool laboratory of United States Testing Co. Mr. Cowsert formerly was associated with Sonora (Tex.) Wool and Mohair Co. for six years. In his new capacity he will supervise research in sampling and testing procedures for determining shrinkage, grade, fiber strength, etc., in addition to supervision of the regular processing of samples.

E. V. Helms, Chattanooga, Tenn., representative of Geigy Dyestuffs, a division of Geigy Chemical Corp., will be manager of the new Chattanooga branch to be opened soon by the division. The branch will serve the South Central region. Mr. Helms has been with the company 16 years.

Alfred McGregor has been designated a supervisor in the dyestuff application laboratory of Metro-Atlantic Inc. Mr. McGregor joins Metro-Atlantic after five years of service with Arnold, Hoffman where he had headed its Providence technical service laboratory for the past two years. Formerly he had been with John Campbell & Co. Inc. for 22 years, the last 14 of which he headed that company's dye application laboratory.

Harry New, formerly associated with Chemstrand Corp., has been named Southern sales representative for Acme Backing Co. of New York City. His territory will include the Carolinas, Georgia and Alabama, with headquarters at Greenville, S. C.

OBITUARIES

Joseph Wylie Carroll,, former Gastonia, N. C., textile official, died March 22 in St. Petersburg, Fla., where he was spending the Winter. Mr. Carroll was associated with the late Col. C. B. Armstrong in the textile business, serving as a director of Clara, Dunn & Armstrong Mills, Gastonia, and Piedmont Mills. He was vice-president of Ruby Mills, now U. S. Rubber Co. plant, and was a director of Lowell Mfg. Co., Stanley, N. C., Rhyne-Houser Mfg. Co., Cherryville, N. C., and Catawba Spinning Co., Mt. Holly, N. C. At one time he served as Gastonia police chief. His widow survives.

Fred Mark Fowler, 60, former superintendent of Hart Cotton Mills Inc., Tarboro, N. C., died March 22 in Durham, N. C. Prior to his association with Hart, Mr. Fowler had been superintendent of Chadwick-Hoskins Mills, formerly of Charlotte, N. C. Survivors include his widow, seven daughters, a son and a sister.

Alfred A. Halden, 61, executive vice-president and director of National Starch Products Inc., died recently in New York City. Mr. Halden, a chemical engineer, joined the staff of National Starch in 1919. He was named a director of the company in 1932, secretary in 1938 and vice-president in charge of manufacturing in 1941. Surviving are his widow, a daughter, a sister and two brothers.

William Edward Hammond, 81, superintendent of Balfour (N. C.) Mills—now Berkeley Mills Inc.—from 1924 until his retirement in 1946, died last month in Balfour. Mr. Hammond at one time was a member of the board of governors of the Southern Textile Association. He is survived by five sons and four daughters.

Nicholas S. Handal, 57, president of South Carolina Cotton Mills Inc., Orangeburg, S. C., died last month in Japan while on a world-circling vacation. Mr. Handal, who made his home in New York, was also head of S. Handal & Sons, New York City. Surviving are his widow and two sons.

Herman Read Rice Sr., 70, former executive vice-president of Springs Cotton Mills, Lancaster, S. C., died April 1 in Lancaster. He is survived by his widow, three sons, a daughter and two brothers.

John C. Turrell, 75, retired director of Cluett, Peabody & Co. in charge of the Sanforized division, died last month in Florida. Mr. Turrell, who retired in 1947, joined Cluett, Peabody in 1925, and was named director of the Sanforized division in 1930. Survivors include his widow, two daughters, a son and two brothers.

Jacob S. Verlenden, 77, former president and chairman of the board of Standard-Coosa-Thatcher Co., Chattanooga, Tenn., died recently in Philadelphia, Pa. Mr. Verlenden, who retired in 1948, was also associated at one time with Verlenden Bros. Inc., Darby, Pa., wool manufacturer. Three sons and four sisters survive.

MILL NEWS

CONSTRUCTION. NEW EQUIPMENT. FINANCIAL REPORTS. CHARTERS. AWARDS. VILLAGE ACTIVITY. SALES AND PURCHASES

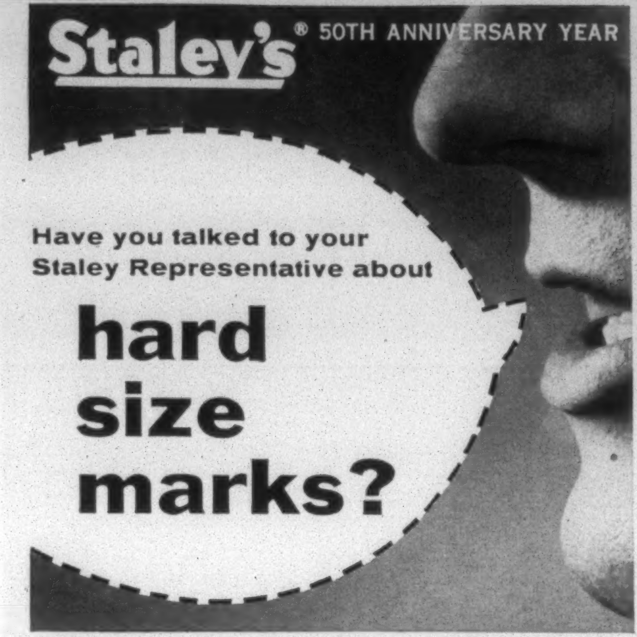
BALTIMORE, MD.—Stockholders of Mount Vernon-Woodberry Mills Inc. have voted to change the name of the company to Mount Vernon Mills Inc. According to Thomas M. Bancroft, president, the company is known throughout the trade as Mount Vernon and it was felt that it would be advantageous to shorten the corporate name to conform with this general usage. The company operates Columbia (S. C.) Mills Co. and Arcade Mills, Rock Hill, S. C.

SPRAY, N. C.—Spray Cotton Mills has purchased some 2,610 shares of common stock of the company that have been in the hands of the U. S. Office of Alien Property since early in World War II. The stock, owned by a number of German individuals, was confiscated as alien property. It was offered for sale at public auction last October, but bids submitted at that time were rejected by the government as inadequate. Subsequent bids were taken a second time, but they also were turned down. Offered a third time, the stock drew a bid of $210,000 from Spray Cotton Mills, which the government promptly accepted as closer to what the Office of Alien Property felt the stock was worth. The 2,610 shares constitute about 32 per cent of the common stock of the company.

CHARLOTTE, N. C.—Joseph L. Wright, general superintendent of Johnston Mfg. Co. here, has announced that major improvements are being made at two of the company's plants—Park Yarn Mills Co., Kings Mountain, N. C., and Eastern Mfg. Co., Selma, N. C. A program to cost about $125,000 at Park Yarn Mills will include Whitin changeovers for 23,000 spinning spindles and installation of three new Whitin 10x5 roving frames. A 2,000-square-foot addition is being built at Eastern to house a new Bahnson system of evaporative, central station cooling.

CLAYTON, GA.—James Lees & Sons Co. of Bridgeport, Pa., carpet manufacturer, has announced plans to erect a $2 million plant here for the production of tufted carpets. Operation of the new mill will be carried on by Rabun Mills Inc., a new Lees subsidiary. Lees announced recently that it was closing down production of worsted yarn products at Bridgeport, terming it an unprofitable operation. The division is to be eliminated gradually over the next several months.

HENDERSON, N. C.—Textron American has offered to buy all the stock of Carolina Bagging Co. here, producer of cotton batting, sisal pads, carpet cushions, felt for the automotive, furniture and varied industries, as well as jute bagging and cotton ties for covering bale cotton for shipment. The offer is now under consideration by Carolina stockholders. According to officials of the two companies, Carolina Bagging operations



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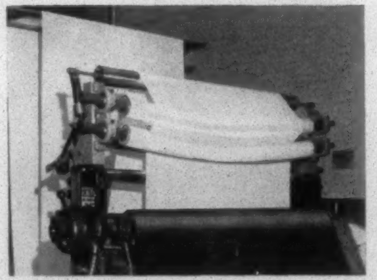

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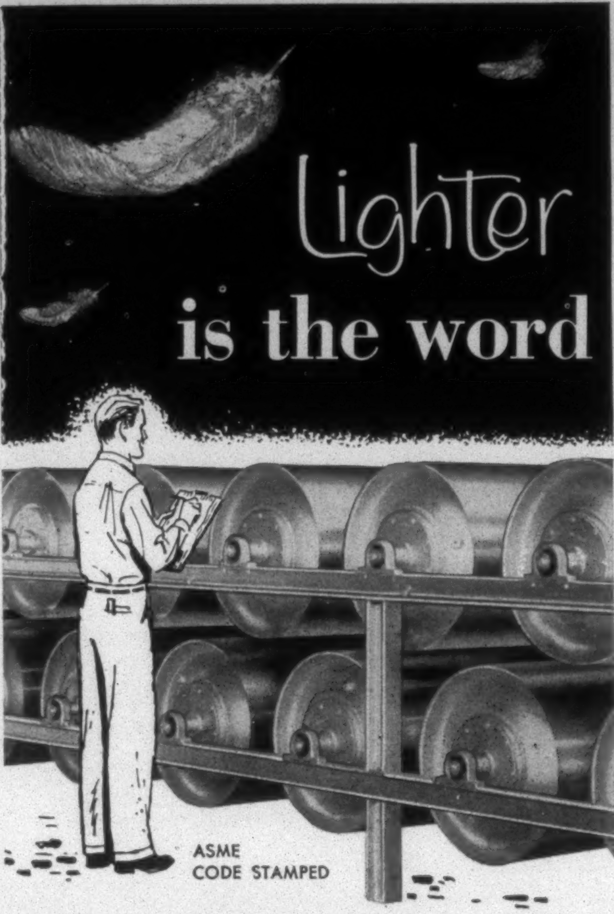

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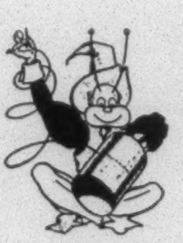

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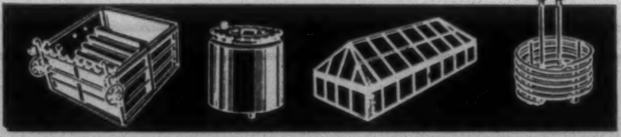

would continue unchanged, being operated as part of, and in conjunction with, F. Burkart Mfg. Co., a division of Textron American.

LIBERTY, S. C.—A 16,000-square-foot addition is being added to Woodside Mills here. Cost of the project, together with equipment to be installed, will be about $600,000, according to W. H. Beattie, Woodside president. When the project is complete, the Liberty plant will have been converted entirely from print cloth to combed goods production. Present ratio is about 50-50. Daniel Construction Co., Greenville, S. C., is contractor for the addition.

CLEVELAND, TENN. — Peerless Woolen Mills has begun construction here on its new 250,000-square-foot plant. The plant, which will produce women's wear fabrics, is expected to be completed by June or July and in full operation by early Fall. The firm's present plant here, devoted entirely to weaving, employs about 260, but the new plant will permit finishing of the fabric, with an increase in employment to about 350.

BYNUM, N. C.—J. M. Odell Mfg. Co. is currently installing 16 new Whitin Superflex spinning frames and three 10x5 Failes & Jenks roving frames. The plant produces knitting yarns.

SALISBURY, N. C.—North Carolina Finishing Co. has merged with Erlanger Mills Corp., which previously owned control of the finishing company. The business will continue to be conducted under the name of North Carolina Finishing Co. and there will be no change in directors, officers or management.

LINCOLNTON, N. C.—Tait Yarn Co. Inc. is completing a brick expansion to its plant that will increase capacity from 6,000 to 7,600 spindles. Some 10,000 square feet of floor space is being added.

LEXINGTON, N. C. — Wennonah Cotton Mills Co. has entered the combed sports shirting field with the expansion of the plant and addition of machinery. According to Earl E. Riddle, vice-president and general manager, production of sample all-combed goods began last month. The company has erected a 4,000-square-foot addition and has installed five new Whitin combers and a Whitin sliver lapper. In addition, 13 reconditioned Whitin cards have been installed. The plant's regular production is on ginghams, suitings and tickings.

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CHARLOTTE, N. C.—Highland Park Mfg. Co. is converting its No. 1 plant here to a combed yarn mill, according to Tom W. Church, executive vice-president. The company has purchased 12 Whitin Model J combers and complementary equipment for the conversion and is adding 12 Whitin Superflex spinning frames comprising 3,120 spindles.

SALISBURY, N. C.—Ben R. Rudisill, president and general manager of Carlton Yarn Mills Inc., has announced that a spun nylon operation will be established in Carlton's Cartex Division here. The operation will give Carlton customers a complete range in the major synthetics, Mr. Rudisill pointed out. The company already is producing Orlon and Dacron and blends of the two.

CHESTER, S. C.—The city of Chester and Chester County have offered an 800-acre plot of land free to Col. Elliott Springs as the site of a weaving plant of the Springs Cotton Mills. Cost of the proposed plant is estimated at $3 million.

DANVILLE, VA. — Dan River Mills expended $2,083,000 on new machinery during 1955, according to W. J. Erwin, president, in the company's annual report to stockholders. This sum was closely in line with depreciation charges for the year, Mr. Erwin pointed out, and was invested primarily for improved spinning and new combing, spooling and winding machinery as well as beam and package yarn dyeing machinery. The 1955 expenditure brought to more than $36 million the total of such expenditures during the past ten years. Current plans call for a capital investment of some $3 million during 1956 with emphasis continued on more conversion to improved spinning, the purchase of new combers, dyeing machinery and looms.

DALTON, GA.—Bates Mfg. Co. of Lewiston, Me., has disclosed that stockholders of the company are considering the purchase of the manufacturing and processing plants of National Chenille Products Co. here and at Tullahoma, Tenn. National's products have been subject to quality control and styling of Bates since Jan. 1. The proposed acquisition is in line with Bates' major program of product diversification in the home furnishings field.

ELKIN, N. C. — Eighteen 92-inch W-3 Crompton & Knowles looms have been added to the weave room of Chatham Mfg. Co. here. The looms are currently being outfitted with modern attachments, adding to the productive capacity of the mill.

GIBSONVILLE, N. C.—The Minneola Plant of Cone Mills Corp., here, will be modernized at a cost in excess of $2 million and will change production from colored to greige goods, according to Allen W. Cone, plant manager. The modernization and conversion program will include the installation of 86 Saco-Lowell Gwaltney frames to replace 46 narrow gauge filling frames and converting present warp to filling; release of 150 box looms and 300 40-inch model looms and addition of 300 Model X-2 looms; and addition of winding and quilling equipment. The weaving department will retain 200 Model E looms and with the new equipment will have a total of 500 looms. The project is expected to be completed early in 1957.

GREENSBORO, N. C.—Cone Mills Corp. has announced that all weaving operations have been suspended at its Revolution Rayon Plant here. Marion Heiss, vice-president in charge of the plant, reports that 130 looms have been moved from the plant to the Eno Plant at Hillsboro, N. C., and the Hanes Plant at Cliffside, N. C. Some of the box looms, he said, have been moved to the Revolution Flannel Plant. Closing of the Revolution Plant was attributed to the depressed condition in rayon market operations during the past several months.

ALBERTVILLE, ALA. — The Kendall Co. has acquired Julia Cade Mills Inc. here from the Abney family interests. The purchase price was not disclosed but it is understood the assets were acquired for cash. The plant produces print cloth, operating 26,000 spindles and 600 looms, and employing 300 people. The mill will be integrated into the cotton mills division of the Kendall Co., and operations will continue unchanged. Kendall operates six cotton mills in South Carolina—at Pelzer, Newberry, Edgefield and Camden—and one in North Carolina at Paw Creek. The purchase of the Albertville property is part of a general program to strengthen operations of the company's cotton mill division.

HICKORY, N. C.—Shuford Mills Inc. has placed an order for 17 automatic weighing card feeds recently developed by the W. D. Dodenhoff Co. of Greenville, S. C. The feeds will be engineered specifically for Shuford's long staple requirements in the production of carpet yarn. Completion of the installation is expected during June.

LANDRUM, S. C.—The new velvet carpet plant of Bigelow-Sanford Carpet Co. is rapidly nearing completion here. Production facilities at the plant are laid out in a U-shaped pattern, consolidating control of receiving and shipping by placing them next to each other. Except for the large dryers and air conditioning apparatus, the manufacturing operations are on one floor. The plant occupies an area of 243,000 square feet. The office and manufacturing departments are air conditioned. Daniel Construction Co. of Greenville, S. C., is the general contractor, and Lockwood Greene Engineers Inc. are architects-engineers.

ST. STEPHEN, S. C.—Partial operations are getting under way at the new $2 million plant here of Albany Felt Co. and full productiton is expected to be attained by Fall. Official opening ceremonies are scheduled for May 12. The 100,000-square-foot air conditioned plant will employ about 150 in full production, and its output will increase the company's paper machine felt capacity about 20 per cent. All manufacturing operations will be performed at the plant, said to be the first complete felt-making operation in the South. Robert Sloan is plant manager.

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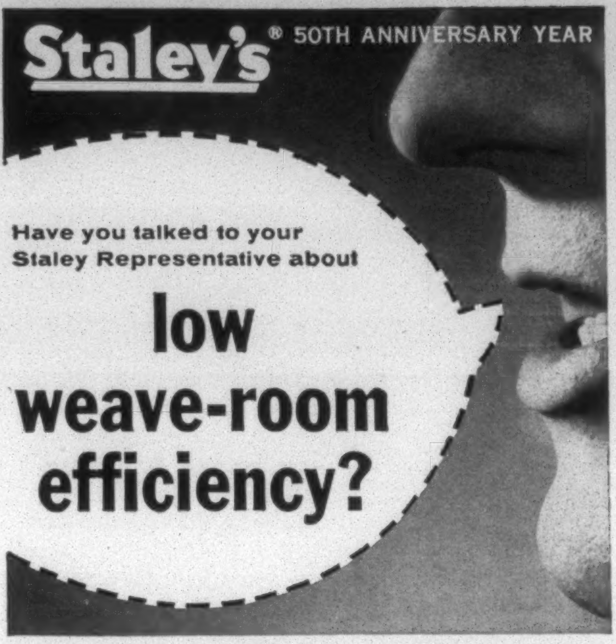

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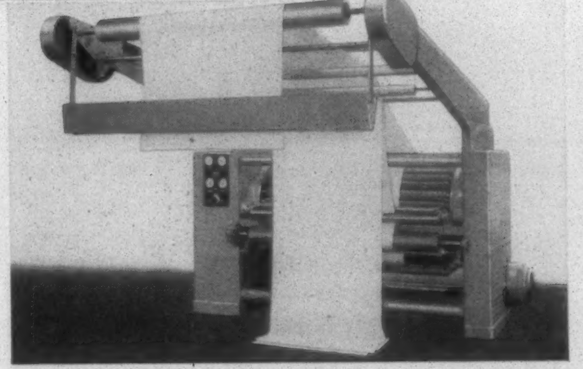

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N.A.W.M. To Elect Officers May 3

T. B. Nilsen, Clinton (Mich.) Woolen Mfg. Co., has been nominated for the presidency of the National Association of Wool Manufacturers. The election will be held May 3 at the Waldorf-Astoria Hotel, New York City, during the 91st annual meeting of N.A.W.M. Mr. Nilsen, now a director and member of the executive committee, would succeed Harold J. Walter, Bachmann Uxbridge Worsted Corp., Uxbridge, Mass. Mr. Walter has been nominated as one of five vice-presidents.

Others nominated for vice-president are John L. Hutcheson Jr., Peerless Woolen Mills, Rossville, Ga.; Minot K. Milliken, Deering, Milliken & Co. Inc., New York; Abbot Stevens, J. P. Stevens & Co. Inc., North Andover, Mass. (all incumbents); and Arthur O. Wellman, Nichols & Co. Inc., Boston, Mass. Also to be elected are six directors. The nominees are D. W. Ellis Jr., A. D. Ellis Mills Inc., Monson, Mass.; J. H. Stursberg, Livingston Worsted Mills, Holyoke, Mass.; Fulton Rindge, Ware (Mass.) Woolen Co.; Lewis Muhlfelder, Albany (N. Y.) Woolen Mills; Charles E. Sigler Jr., Charles E. Sigler & Son, New York; and Arthur C. McGowan Jr., Wyandotte Worsted Co., New York. Nominated as secretary-treasurer was the incumbent, Glen F. Brown.

U. S. Delegation To Attend Standards Meet

The American Standards Association has announced that it will send a delegation of 17 persons to the 1956 meetings of the International Organization for Standardization's Technical Committee 38 on textiles at Southport, England, May 11-18. Included in the delegation are William D. Appel (leader of the delegation), National Bureau of Standards; Charles E. Hilton (secretary of the delegation), American Standards Association; T. L. W. Bailey Jr., U. S. Department of Agriculture; Dr. Earl E. Berkley, Anderson, Clayton & Co., Houston, Tex.; George S. Buck Jr., National Cotton Council, Washington, D. C.; Louis A. Fiori, U. S. Department of Agriculture, New Orleans, La.; Prof. B. L. Whittier, North Carolina State College School of Textiles, Raleigh; E. T. Pickard, Kent, Conn.; Dr. Arthur G. Scroggie, Du Pont Co., Wilmington, Del.; Dr. John W. Wright, U. S. Department of Agriculture; Otto Goedecke, Otto Goedecke Corp., Hallettsville, Tex.; Joel F. Hembree, Cotton Research Committee of Texas, Austin; William L. Wilt, The Sheffield Corp., Dayton, Ohio; Dr. K. L. Hertel, University of Tennessee, Knoxville; William A. Newell, North Carolina State College; George W. Pfeiffenberger, National Cotton Council, Memphis, Tenn.; and A. L. Vandergriff, Loomis Gin Co., Columbus, Ga.

Purchasing Agents Discuss Transit Costs

The savings possible through better use and knowledge of freight carriers and their tariffs and the desirability of advice from traffic experts were emphasized at a recent meeting of the Carolinas-Virginia Purchasing Agents Association at Greenville, S. C.

Paisley Boney, J. P. Stevens & Co. Inc., Greensboro, N. C., presided over a forum which included A. H. Lathrop, American Enka Corp., Enka, N. C., who told the meeting that transportation is a part of the cost of any sale or purchase and that cost may frequently be the determining factor as to the wisdom of a transaction. Traffic experts should be consulted by purchasing departments on the economies of various modes of transportation and methods of shipment to determine maximum economies, he pointed out.

R. J. Van Liew, general traffic manager, Blue Bell Inc., New York City, told the session that considerable savings are possible by consolidation of shipments coming from a number of suppliers in one area; warehouse space can be set up to concentrate these shipments and obtain the savings of bulk shipment. Where small quantities are being bought periodically, he said, a question should be raised as to whether larger purchases and less frequent shipment would justify the possible savings. Purpose for which the goods are to be used can be a determining factor. Time—in transit, by mail and by water—can often be used to the purchaser's advantage in scheduling shipments.

Mr. Van Liew cited an example of a cutter whose costs of transportation of supplies (in some cases fabric sent by air express) exceeded the profits made on the finished goods. The advice of a traffic expert remedied the situation. Preparation of routing guides showing most economical means of transportation of various weights and destinations was advised, he said.

Color Association Elects New Directors

The Color Association of the United States, formerly The Textile Color Card Association, elected four new members to its board of directors at the group's recent 41st annual meeting held in New York City. The new members of the board are Dorothy Shaver, president of Lord & Taylor and vice-president of Associated Dry Goods Corp.; William G. Lord, president of Galey & Lord and vice-president of Burlington Industries Inc.; George E. Holbrook, assistant manager of the organic chemicals department, E. I. du Pont de Nemours & Co. Inc.; and Eleanor Lambert, president of Eleanor Lambert Inc.

Prefacing the annual report made by the association's executive director, Estelle M. Tennis, John M. Hughlett, vice-president of J. P. Stevens & Co. Inc. and president of The Color Association, cited 1955 as a year of major accomplishment by the association. "The change of name of the association is symbolic of the re-focusing of the association's over-all objective," he said. "Our far-seeing aim is to steadily expand our program of color research, color forecasting and color information." In her annual report covering the association's activities for the fiscal year 1955, Miss Tennis traced the expansion of the organization's services. More than 20,000 seasonal color cards and advance swatch sets were issued during the year, she stated.

Textile Research Institute Holds Annual Meet

The 26th annual meeting of the Textile Research Institute was held March 22-23 at the Hotel Commodore, New York City. One of the highlights of the meeting, attended by some 700 persons, was the re-election of Sydney M. Cone Jr., vice-president of Cone Mills Corp., Greensboro, N. C., as president and chairman of the board of T.R.I.

Walter Regnery, vice-president of Joanna (S. C.) Cotton Mills Co., was named vice-president of the institute, succeeding Norman C. Armitage, vice-president of Deering

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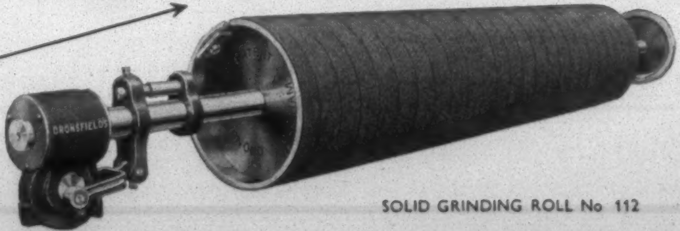
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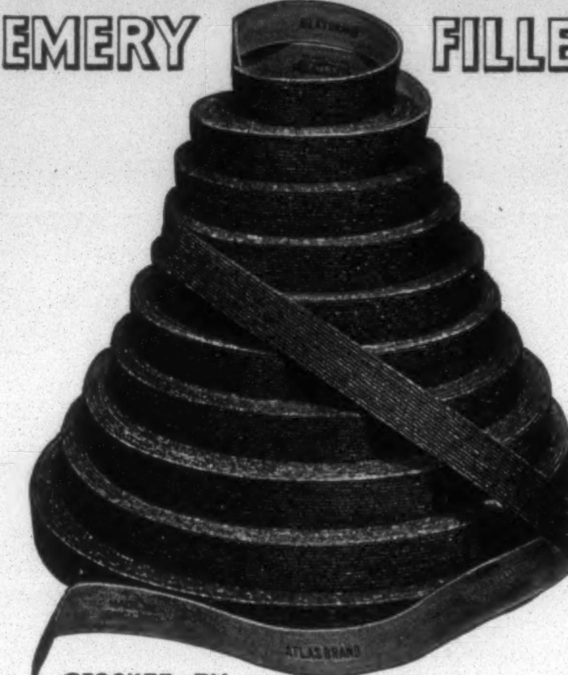

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Milliken Research Corp., Pendleton, S. C. William E. Clark, vice-president and general manager of the textile division, U. S. Rubber Co., was elected treasurer, succeeding Dr. Donald H. Powers, director of cosmetics research, Warner-Lambert Pharmaceuticals Co. Re-elected secretary was Paul C. Alford Jr.

Ten members were elected to the board of trustees. Six of these were new, including George S. Buck Jr., technical director, National Cotton Council of America, Washington, D. C.; John J. Hanlon, technical director, Mohasco Industries Inc., Amsterdam, N. Y.; Robert M. Jones, vice-president in charge of research, Saco-Lowell Shops, Biddeford, Me.; Willard W. McLeod, vice-president in charge of research, Coats & Clark Inc., Newark, N. J.; Russell B. Newton, president, Deering Milliken Research Corp., Pendleton, S. C.; and Dr. Russell W. Peterson, director of textile and industrial products research division, Du Pont, Wilmington, Del.

Re-elected to the board were Andre Blumenthal, chairman and treasurer, Sidney Blumenthal & Co. Inc.; William J. Erwin, president, Dan River Mills, Danville, Va.; Brackett Parsons, president, Pepperell Mfg. Co., Boston, Mass.; and Richard D. Wells, director of research and development, Bates Mfg. Co., Lewiston, Me. Retiring from the board were Dr. Norman C. Armitage; A. G. Ashcroft; Dr. Earl E. Berkley; Dr. Hale Church; Dr. Jules Labarthe; Dr. Donald H. Powers; and Harold J. Walter.

The two-day parley opened Thursday, March 22, with a symposium on "Minimum Care Fabrics." Speakers at the morning session included Dr. Jules Labarthe, senior fellow, Mellon Institute, Pittsburgh, Pa.; Dr. Paul Stamm, assistant director of research, Dan River Mills, Danville, Va.; and T. R. Scott, textile research department, American Enka Corp., Enka, N. C.

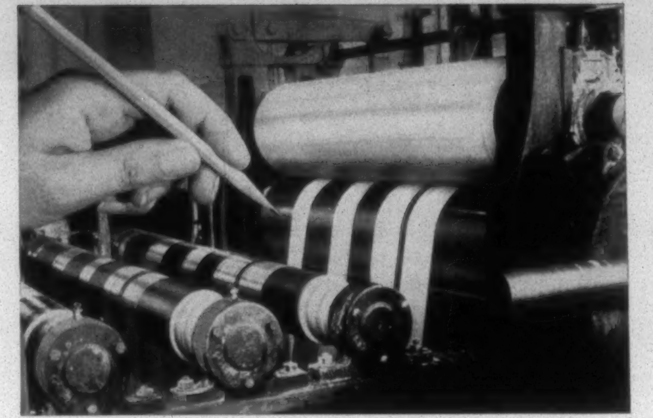
Dr. Stamm told the meeting that even when working under optimum and ideal conditions of fabric geometry and coloration, a cotton fabric must be chemically modified in order to meet today's consumer expectations for minimum care fabrics. "A crease-resistant cotton fabric which cannot be satisfactorily washed by conventional methods and with conventional washing compounds has a severe handicap to overcome in gaining consumer acceptance," he pointed out. Mr. Scott envisioned a large potential market for filament rayons with development of the proper finish. He urged that researchers give thorough study to developing this finish.

Dr. John H. Dillon, director of the institute, presided over the Thursday luncheon which featured an address by Dean Malcolm E. Campbell, School of Textiles, N. C. State College, Raleigh, N. C. Dean Campbell emphasized the fact that research people must get out and merchandise the values and merits of research if they are to bridge the gap of indifference to this vital function now prevalent in the textile industry. In his remarks, entitled "The Tail That Wags the Dog," he pointed out that the textile industry spends only one-tenth of one per cent of its sales on research while other industries spend an average of two per cent, and some as high as five to seven per cent. He listed three primary reasons for the industry's negative attitude toward research: (1) the industry is a low-profit one; (2) there are too many small-size mills in the industry; and (3) the industry doesn't understand the fact that research is a means of insuring its economic destiny. Researchers, he said, must share some of the blame for the poor selling job done. Too many researchers talk too much among themselves and employ scientific jargon that loses the average mill executive. Researchers must do a better selling job in promoting research and development, whether it is their job or not, if they want to see results accomplished, he said.

The Thursday afternoon session continued the symposium on "Minimum Care Fabrics." Dr. Gerald Laxer, director of science and technology, The Wool Bureau Inc., New York City, told the session that wool fabrics can also be termed minimum care materials in certain respects and especially where the largest present markets lie—outerwear and apparel. Emphasizing the importance of moldability of such garments and tailoring and manufacturing qualities, he pointed out that it had been found that the drying rate of all fabrics had been found to be essentially the same. Therefore, in fabrics of similar construction, the drying time should also be equal.

Dr. R. W. Peterson, director of textile and industrial products research division, E. I. du Pont de Nemours & Co. Inc., Wilmington, Del., reported to the session that fabrics of Dacron polyester fiber appear to be better than those of Orlon and nylon in the hydrophobic group in performance in wash and wear fabrics. This performance by Dacron, he said, appears to stem from its high crease recovery, relative insensitivity to water, low rate of relaxation under stress and marked increase in crease recovery when heated. This fact was one of several findings that resulted from exhaustive laundering research with fabrics and garments made with Dacron, Orlon and nylon. Through use of home laundry dryers, Dr. Peterson said, these studies showed that ease of care fabrics made with these fibers can be laundered in hot or cold water with no need for ironing and with retention of creases and pleats providing the fabrics are tumble-dried for a half hour at a temperature within ten degrees of 170° F., followed by five to ten minutes of cooling while tumbling. Dr. Peterson also predicted that a satisfactory system of washing with cold water might be worked out as a means of reducing the cost of washing and of preventing wrinkling during washing. A further boon to housewives, he said, may prove to be the discovery that the tumble drier can be used to "press" garments wrinkled by wear or laundering with tumbling for a half hour followed by five to ten minutes of tumbling without heat. The tests were made on standard washers and dryers available through home appliance dealers.

The Friday morning session consisted of a report on T.R.I. research activities during 1955 by Helmut Wakeham, director of research for the institute, and a paper entitled "Taking the Risk Out of New Product Development" by Dilman M. K. Smith, vice-president, Opinion Research Corp. The luncheon session heard the president of the institute, Sydney M. Cone Jr., give his annual report on "The State of the Institute." Guest speaker at the luncheon was Herman D. Ruhm Jr., president of Burlington Industries Inc. Mr. Ruhm, in a paper discussing "Some Unsolved Problems," pointed out that the textile industry, as well as consumers, would benefit considerably if greater emphasis could be placed on a calm, objective approach by research personnel to the practical translation of fiber facts into fabric characteristics. "There is a vast difference between a fiber produced in the laboratory and a finished fabric made into a garment," he stated. "Unless the textile industry and yarn producers can find ways and means of



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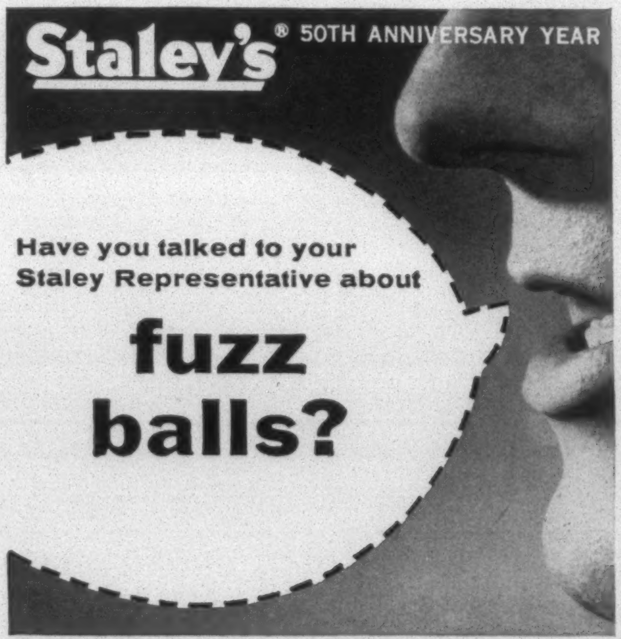
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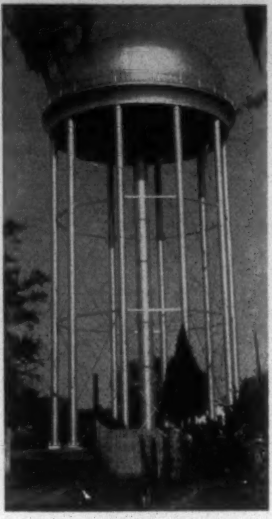

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translating fiber facts into fabric characteristics, discoveries made in the lab on fibers are of no use either to us or to the consumer." Mr. Ruhm also lamented the fact that the textile industry is spending far less on research and development than other industries. Some projects that research must be devoted to, he said, include: (1) problems of dyeability of man-made fibers; (2) sensitivity of rayon to moisture; (3) low strength of acetate-type yarns; (4) sensitivity of new man-made fibers to static and to effects of pilling; and (5) lack of comfort in garments made from fabric with low moisture absorption or poor moisture dispersion.

Highlight of the closing afternoon session was a report on "A New Process for Compacting Textile Materials," by Walter J. Hamburger and Kenneth R. Fox of Fabric Research Laboratories Inc., Dedham, Mass. The research and development leading to the process was presented, a description of production machines now in several mills was given, test results were announced and opportunities for the use of the process were demonstrated. Riggs & Lombard Inc. of Lowell, Mass., which collaborated in the design of the production compacting machine, is in production and deliveries are expected to be reasonably prompt. *(Editor's Note:* For a full description of the Riggs & Lombard production compacting machine, see Page 34.)

In a special announcement at the Thursday luncheon meeting, Dr. John H. Dillon, T.R.I. director, made known that the institute's board of trustees have named the new meeting hall, now under construction at the institute, the Edward T. Pickard Seminar Room. Mr. Pickard, as executive secretary and assistant treasurer of the Textile Foundation, was instrumental in organizing the Textile Institute, and has long served the industry in research matters. He has been a member of the T.R.I. board of trustees since 1942, and he is also treasurer of the National Council for Textile Education, which dedicates its activities to advancing textile education.

Exhibitors at the annual meeting included American Cyanamid Co., American Viscose Corp., Custom Scientific Instruments Inc., Du Pont, Eastman Chemical Products Inc., Fabric Development Tests, Fiber Research Corp., Hart Moisture Meters, Instron Engineering Corp., Ivan Sorvall Inc., Lindly & Co., The Perkin-Elmer Corp., Riggs & Lombard Inc., United States Testing Co. Inc. and Werner Textile Consultants.

N. C. Foundation Adopts New Support Plan

The North Carolina Textile Foundation, holding its annual meeting recently at Gastonia, N. C., approved a plan under which textile plants in North Carolina will be asked to make sustained contributions toward support of the North Carolina State College School of Textiles. The plan calls for each textile firm in North Carolina to contribute $1 per year for each employee. It would yield an annual foundation income of $227,000 if all mills adopt the program. The Foundation's current and unsystematic appropriation runs about $70,000 a year.

All officers of the foundation were re-elected by the directors at the meeting. They include J. Harold Lineberger, Belmont, president; Clyde W. Gordon, Burlington, vice-president; Alex Shuford Jr., Hickory, treasurer; and C. E. Baxter, Greensboro, secretary and assistant treasurer. The office of second vice-president, last held by the late Herman

Cone, Cone Mills Corp., Greensboro, N. C., was discontinued. Elected directors to fill vacancies on the 50-member board were Ceasar Cone, Cone Mills Corp., Greensboro; Robert L. Huffines, Amerotron Corp., Aberdeen; and Tom W. Church Jr., Highland Park Mfg. Co., Charlotte. They succeed John F. Matheson (who has moved from the state), the late Mr. Cone and the late David Clark, Clark Publishing Co., Charlotte. Ceasar Cone was also named to the executive committee, together with A. G. Myers, Textiles Inc., Gastonia, succeeding the late Messrs. Cone and Clark.

In paying tribute to Messrs. Cone and Clark, the foundation passed resolutions honoring the contributions of both. The tribute to Mr. Clark, who died Nov. 15, 1955, reads (in part):

"The clear vision, sound judgment and persevering efforts of David Clark have played a major role in the development of textile education and research at North Carolina State College. His vigorous leadership as a founder of the North Carolina Textile Foundation has made secure the universal recognition of the School of Textiles at Raleigh as a leading center of textile education and textile progress.

"The foundations that David Clark stimulated to assist education and research at other schools at North Carolina State College and his intense personal interest in all aspects of the college stands as a monument for those who believe that sound education is a prerequisite for the preservation of democracy.

"His unique and dynamic leadership as a textile executive, publisher and civic leader will be long remembered and are indelibly written in the annals of the State of North Carolina and the South. In all things, David Clark was motivated by his deep interest in young people and in developing the economy of the state in which he and they lived. His contributions were limited only by the fact that life was not as simple as he thought it ought to be."

The resolution honoring Mr. Cone, who died Dec. 10, 1955, reads (in part):

"Herman Cone strongly assisted in the organization of the North Carolina Textile Foundation, and from the date of its founding served as a director and a loyal, enthusiastic member and supporter. At the time of his passing, he held the office of vice-president of this organization.

"Herman Cone is remembered as a leader in his industry, both as chairman of the board and president of a great textile corporation and as the president of several industry associations.

"Herman Cone is remembered as a great civic leader and philanthropist who served in many capacities in the development and improvement of his community and the welfare of its citizens.

"In all these, Herman Cone worked for the betterment of mankind and his environment. In all of these, he provided keen analytical assessment and sympathetic understanding. His advice, guidance and sound judgment were freely sought, freely given and deeply respected. For his endowments to the textile industry he will be remembered; in the case of the textile industry his loss shall be deeply felt."

Textile School Deans Hold Spring Meet

The National Council for Textile Education, comprised of the deans of all the textile schools in this country, held its Spring meeting March 19-21 at Summit, N. J. The educators, meeting at the research laboratories of the Celanese Corp. of America, again pooled their thoughts on how the industry can best equip itself to attract more promising high school graduates into textile careers. They faced up to the fact that little has been done to "glamorize" textiles, a practice commonly used successfully by other industries. The fact that starting salaries in the industry and allied fields have been boosted has been of some help, they pointed out, but this inducement has been brought on by the scarcity of graduates available and not by any agreement between the educators and leaders in the industry.

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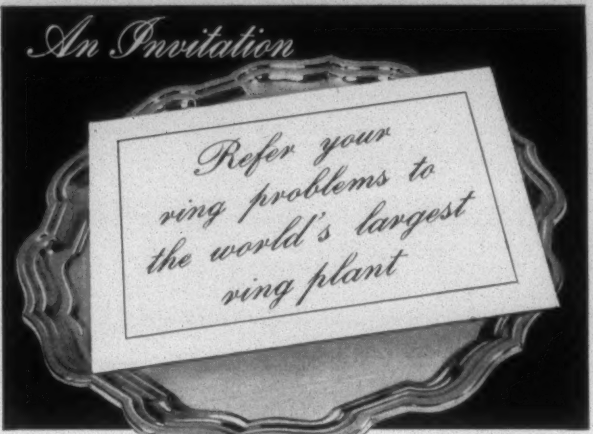

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tive to high school students at the present time is the muddled import situation, it was said. The apparent indifference shown by the federal government about the industry's plight is felt to have dissuaded any number of prospective students. New Englanders especially are said to be advising their sons against entering an industry so subject to booms and busts.

The seriousness of this situation is apparent when the number of professional engineers graduated in this country is compared with the number being turned out in Russia. A special guest at the meeting, G. Loadsby of British Nylon Spinners Ltd., Pontypool, Monmouthshire, England, who is chairman of the Council of the Institute, England's counterpart to the National Council for Textile Education in this country, cited figures showing that the U.S.S.R. with a population of 240 million is producing about 60,000 professional engineers a year while the U. S., with a population of 162 million, is graduating some 22,000 a year. Russia has plans for a 50 per cent increase over these figures, he said.

The deans also made progress reports on a variety of projects being carried out at the various schools, each citing improvements and modifications now in various stages of planning or completion. These included not only new physical facilities for research and development activities, but also changes in curriculum. More and more emphasis, it was pointed out, is being given management training, and larger appropriations are being sought to make further improvements. A particularly ambitious project was described by Dean Malcolm E. Campbell of the North Carolina State College School of Textiles. He pointed out that Gov. Luther Hodges of North Carolina, a former textile executive, has plans for what he calls a "research triangle in North Carolina," taking in Duke University, the University of North Carolina and North Carolina State College, and developing a tremendous research program around the three. Governor Hodges has named Robert Hanes of Winston-Salem, N. C., retired president of the Wachovia Bank

Carter, Davenport, McDonald, Fry

NEW OFFICERS OF THE CHATTANOOGA YARN ASSOCIATION for the year 1956 are Frank L. Carter of Textiles Inc., president; Hubert Fry of Central Franklin Process Co., vice-president; Col. R. D. McDonald, treasurer; and Harvey Davenport of American & Efird Mills, secretary.

At a meeting held recently, plans were made for the group's 31st annual golf tournament and skeet shoot, scheduled for Sept. 20-21 at the Lookout Mountain Hotel.

& Trust Co., to lead this movement and plans are now going forward.

Winding up the three-day meeting, the deans endorsed the idea that a survey of textile education should be made in the not too distant future as an aid in guiding the textile schools in their operations. The last such study was made in 1932, it was noted. The committee that brought in this proposal was authorized to hold conversations with various agencies to see what could be accomplished and what such a survey would cost. The survey would seek answers to such questions as: What are the textile schools doing today? What are they trying to do? Where are textile graduates going after they leave the textile colleges? What changes should be made to bring college courses up to date?

Still another proposal was the possibility of bringing the textile school deans together in conference with industry leaders for the purpose of sighting common goals. Such a conference could possibly be arranged, it was pointed out, for the Fall meeting of the council. This meeting will be held at Sedgefield Inn, Greensboro, N. C., at the invitation of J. Spencer Love of Burlington Industries, probably in late October or early November. The council has been invited to return to Summit again for its Spring meeting in 1957.

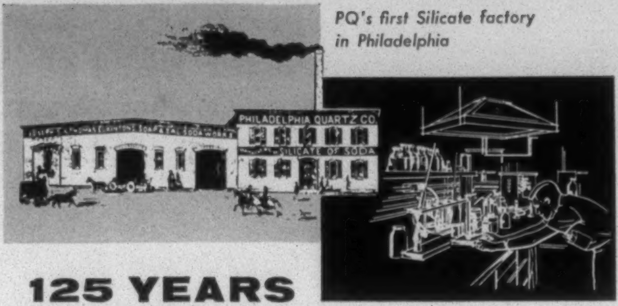
March Rayon And Acetate Shipments

United States producers of rayon and acetate yarn and staple shipped a total of 101,700,000 pounds in March, a decrease of four per cent compared with February, according to the *Textile Organon,* statistical bulletin of the Textile Economics Bureau Inc. Shipments to domestic consumers amounted to 100,100,000 pounds and 1,600,000 pounds were exported.

Total shipments in the first quarter of 1956 totaled 323,100,000 pounds, two per cent less than the 329,300,000 pounds shipped in the corresponding period last year. Domestic shipments amounting to 318,000,000 pounds were down two per cent compared to the first quarter a year ago, while export shipments totaling 5,100,000 pounds were up 21 per cent.

High tenacity rayon yarn shipments last month came to 36,800,000 pounds. First quarter high tenacity shipments totaled 107,800,000 pounds, five per cent more than was shipped in the comparable 1955 period. High tenacity inventories in the hands of producers at the end of March continued nominal at 7,100,000 pounds. March shipments of regular+intermediate tenacity rayon yarn, according to the *Organon,* came to 16,000,000 pounds and brought the first quarter total to 54,600,000 pounds, or five per cent less than shipments in the first quarter of 1955. Stocks at the month-end were 20,500,000 pounds, up somewhat compared with February. Similarly, acetate yarn deliveries in March at 14,800,000 pounds were lower than those in February and ending stock increased slightly to 21,900,000 pounds. First quarter shipments amounted to 56,500,000 pounds or seven per cent less than was shipped in the first quarter of 1955.

Rayon staple+tow shipments in March at 29,300,000 pounds were up slightly compared with February and first quarter shipments in this category amounted to 89,300,000 pounds or 1.5 per cent over shipments in the first quarter of 1955. Acetate taple+tow shipments in March amounted to 4,800,000 pounds or the same as February. However,



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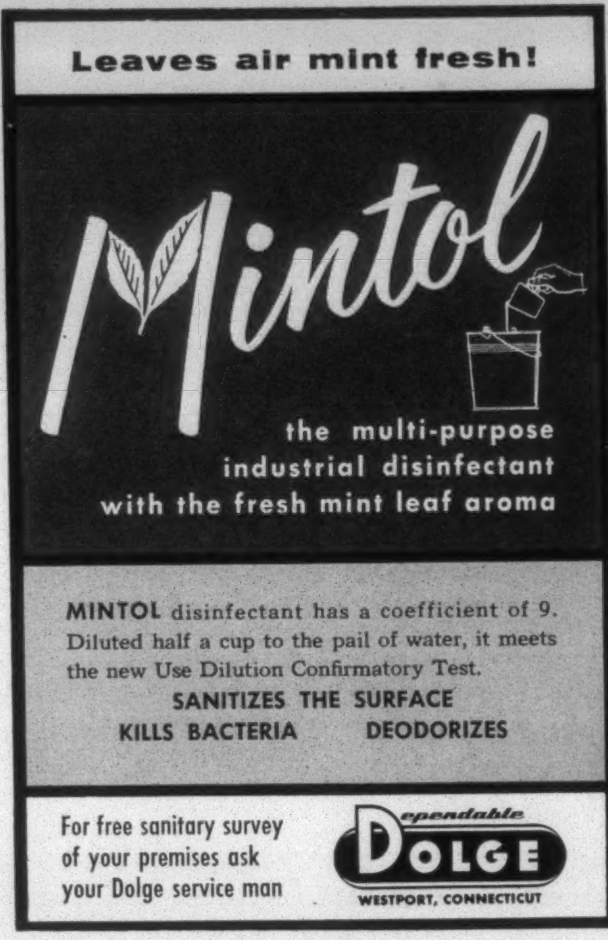
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first quarter 1956 shipments of acetate staple+tow at 14,900,000 pounds were down 28 per cent compared with the January-March period a year ago.

Imports of rayon staple into the United States in January, the *Organon* points out, amounted to 9,017,000 pounds, two per cent less than those in the preceding month. The leading supplier of foreign rayon staple in January was the United Kingdom which sent in a total of 1,949,000 pounds or 21.5 per cent of the January total. Western Germany, the leading supplier in 1955, was second on the list with a total of 1,714,000 pounds or 19 per cent of all January imports. Other important suppliers of foreign rayon staple in January were France with 1,389,000 pounds, Italy 897,000 pounds, Austria 761,000 pounds, Switzerland 500,000 pounds, Cuba 359,000 pounds and Sweden 178,000 pounds.

Imports of non-cellulosic fiber in January came to 39,000 pounds.

February Cotton System Spinning Activity

The Bureau of the Census, Department of Commerce, has announced that, according to preliminary figures, 21,971 thousand cotton system spinning spindles were in place in the United States on February 25, 1956. Of these 19,428 thousand were consuming cotton, 1,555 thousand were consuming other than cotton, and 988 thousand were reported idle.

The total cotton system spinning spindle hours reported for the February period amounted to 10,347 million, an average of 517.3 million hours per working day (based on 20 days). During February cotton system spinning spindles operated at 147.2 per cent of capacity (based on 20 days of 16 hours) compared with 146.6 per cent for January (based on 20 days of 16 hours).

Cotton Broad Woven Fabric Production

Cotton broad woven fabric production in the fourth quarter of 1955 was ten per cent above the third quarter 1955 output, and five per cent higher than the fourth quarter 1954 level, according to the Bureau of the Census, Department of Commerce. Production increases ranging from five to 15 per cent were reported for all fabric groups except napped fabrics, blankets and blanketing, which decreased four per cent compared to the previous period. The output of duck and allied fabrics and towels, toweling and dishcloths, increased 15 per cent, while fine cotton fabrics and other woven cotton fabrics and specialties, increased 14 per cent over the previous period.

Spinners Hold Sold-Ahead Position

The statistical position of carded cotton sales yarn spinners showed little net change at the end of February operations, the Textile Information Service reports. Spinners' backlogs of unfilled orders amounted to 11.36 weeks' pro-

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duction and were 8.38 times stocks on March 3. This compares with backlogs equal to 11.66 weeks' output and 9.77 times stocks on Feb. 4. Unfilled orders at the beginning of March last year amounted to 9.64 weeks' production and were 6.06 times stocks on hand. Inventories, including yarn made for future deliveries against unfilled orders, amounted to 1.36 weeks' production on March 3. On Feb. 4, stocks equalled 1.19 weeks' output and on March 5, 1955, they amounted to 1.59 weeks' production.

According to statistics of the Carded Yarn Association, covering reports from approximately 1.4 million member spindles, production in the week ended March 3 consisted of 34.3 per cent knitting yarn, 34.6 per cent weaving yarn and 31.1 per cent all others. On Feb. 4, the percentages were 36.1, 35.0 and 28.9, respectively, and for the week ended March 5, last year, they were 32.8, 37.0 and 30.2.

Wool Consumption And Stocks—February 1956

The February rate of fiber consumption on the woolen and worsted systems was four per cent above the January rate and 17 per cent above that of February 1955, according to the Bureau of the Census, Department of Commerce. The weekly average raw wool consumption during February was 9,839 thousand pounds (scoured basis), or four per cent above the January level, and 19 per cent above that of February 1955. The rate of consumption of carpet class wool increased six per cent compared to the previous month and increased 35 per cent compared to February 1955, while consumption of apparel class wool was three per cent above the January level and 13 per cent above that of February of last year. Consumption of fibers other than raw wool averaged 6,160 thousand pounds per week, or five per cent above the January average, and 14 per cent above the average of February of last year.

World Cotton Spindleage Shows Increase

World cotton spindleage has increased more than half a million during the past two years, according to a review published by the International Federation of Cotton & Allied Textile Industries. The world's cotton spinning mills had 129,838,000 spindles in place on July 31, 1955, according to the report. This compares with 129,521,000 spindles on the same date in 1954 and 129,322,000 in 1953. Decreases in this country and Europe have been offset by increases in Asia and Africa. World's cotton mill consumption for the crop year ended July 31, 1955, is estimated to have been 35,707,000 running bales, an increase of 69,000 bales over the previous year. Spindleage in the U. S. declined from 22,707,000 in 1954 to 22,247,000 in 1955, the report points out, while spindleage in Great Britain slipped from 26,563,000 in 1954 to 25,183,000 in 1955. India increased its spindleage from 11,721,000 to 11,888,000 during the same period while Japan went from 7,853,000 to 7,961,000.

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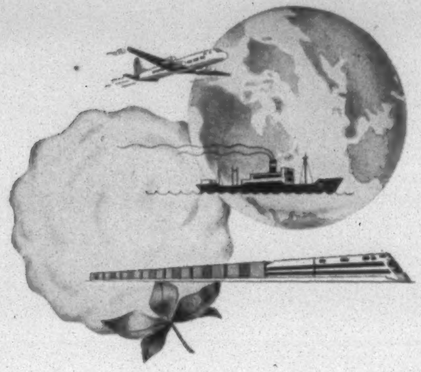

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S.T.A. Highlights

PLANS for the 1956 convention of the Southern Textile Association are shaping up rapidly, according to James A. Chapman Jr., association president. The convention, to be held June 21-23 at Mayview Manor and the Green Park Hotel, Blowing Rock, N. C., is expected to draw an attendance of some 500 persons.

The program for the meeting will include two business sessions—on the mornings of June 22 and 23. Speakers scheduled to address the first session include Erle Cocke, vice-president of Delta Airlines, Atlanta, Ga.; William A. Newell, co-ordinator of research, North Carolina State College School of Textiles, Raleigh; and Frank A. Constangy, an Atlanta, Ga., attorney who specializes in labor law.

Scheduled to address the convention Saturday morning, June 23, is F. E. Grier, who recently assumed the presidency of the American Cotton Manufacturers Institute. Mr. Grier is also president of The Abney Mills and chairman of the board of Erwin Mills Inc. The Saturday session will also hear the remarks of the retiring president, Mr. Chapman.

Other Program Events

The complete program, in addition to the business sessions, will include: Thursday, June 21, 2:30 to 5:30 p. m.—registration; 6:30 to 7:30 p. m.—social hour, courtesy of associate members division; 7:00 p. m.—buffet supper; 9:00 p. m.—millionaires' party; 10:30 p. m.—dancing in the ballroom.

Activities will begin on Friday, June 22, with an 8:30 a. m. meeting of the association's board of governors, followed at 9:00 a. m. by the annual business meeting of the associate members division. The business session will get under way at 10:00 a. m. in the Mayview Manor ballroom, with President Chapman presiding.

An 18-hole Callaway System golf tournament is scheduled for Friday afternoon over the Blowing Rock Country Club course. For non-golfers and the ladies, a bingo contest will be held concurrently in the Mayview Manor ballroom, featuring a variety of valuable prizes. A second social hour will be held between 6:30 and 7:30 p. m., followed by a steak dinner and a floor show in the Mayview Manor ballroom.

The convention will close Saturday morning with the election of officers following the second business session. By custom, H. C. Estes of Pacific Mills, Rhodhiss, N. C., current vice-president of the association, is expected to be elevated to the presidency. W. M. Pittendreigh of Riegel Textile Corp., Ware Shoals, S. C., current second vice-president, is slated to move up to first vice-president. A new second vice-president will be elected, along with four new members for the association's board of governors. Retiring as board members at the close of the convention are P. S. Leach, Consolidated Textile Co. Inc., Lynchburg, Va.; A. M. Moore, Erwin Mills Inc., Durham, N. C.; Horace Pennington, Cone Mills Corp., Greensboro, N. C.; and D. H. Roberts, Lydia Cotton Mills, Clinton, S. C.

Spring Divisional Meetings

South Carolina Division

J. N. Jenkins of Kendall Cotton Mills, chairman of the South Carolina Division of the S.T.A., has announced that his division will hold its Spring meeting on Friday evening, April 27, at Pelzer, S. C., beginning at 6:30 p. m. The meeting, to be held in the Pelzer Elementary School, will feature a program on "Vacuum Scavenger Systems for Spinning Frames." Scheduled to appear as speakers are Hovan Hocutt, Pneumafil Corp., Charlotte, N. C.; Arthur Thomas, Greenville, S. C., representative of The Bahnson Co., Winston-Salem, N. C.; and H. W. Hewitt, Spin-Sa-Vac Corp., Charlotte, N. C.

A second phase of the program will be a question and answer discussion with a panel of four mill men who have had experience with vacuum systems. This panel will include Lewis Thompson, superintendent of Riverdale Mills, Enoree, S. C.; Fred Bodie, overseer of spinning, Lydia Cotton Mills, Clinton, S. C.; B. M. Ware, overseer of spinning, Calhoun Mills, Calhoun Falls, S. C.; and E. T. McClure, overseer of spinning, Upper Plant, Kendall Cotton Mills, Pelzer. The program will be concluded by 9:00 p. m., Mr. Jenkins reports.

Piedmont Division

The Piedmont Division will hold its Spring meeting Saturday morning, May 5, at the Hotel Hickory, Hickory, N. C., beginning at 10:00 a. m., according to R. M. McCrary, chairman of the division and superintendent of Carolinian Mills, High Shoals, N. C. The program will include an address on "Today's Cotton Research in Tomorrow's Mills" by Emmett W. Bringle of the technical department, National Cotton Council, Washington, D. C. A second paper on "Weave Room Requirements in Slashing" will be given by A. L. Park, slashing engineer, Saco-Lowell Shops, Boston, Mass.

A second portion of the program will feature a panel discussion on machinery installations recently made, with the following mill men participating: Luke Brackett, general manager, Highland Park Mfg. Co., Charlotte, N. C.; H. C. Estes, Pacific Mills, Rhodhiss, N. C.; Ed Schrum, Carolina Mills, Maiden, N. C.; and R. T. Stutts, president, Carolinian Mills, High Shoals. Lunch will be made available following the meeting.

Northern North Carolina-Virginia Division

The Spring meeting of the Northern North Carolina-Virginia Division will be held Saturday morning, May 12, at the High Point Y.M.C.A. building, High Point, N. C., beginning at 10:00 a. m. Charles H. Ward of Highland Cotton Mills, High Point, chairman of the division, reports that the program for the meeting will feature discussions on scavenger cleaning equipment.

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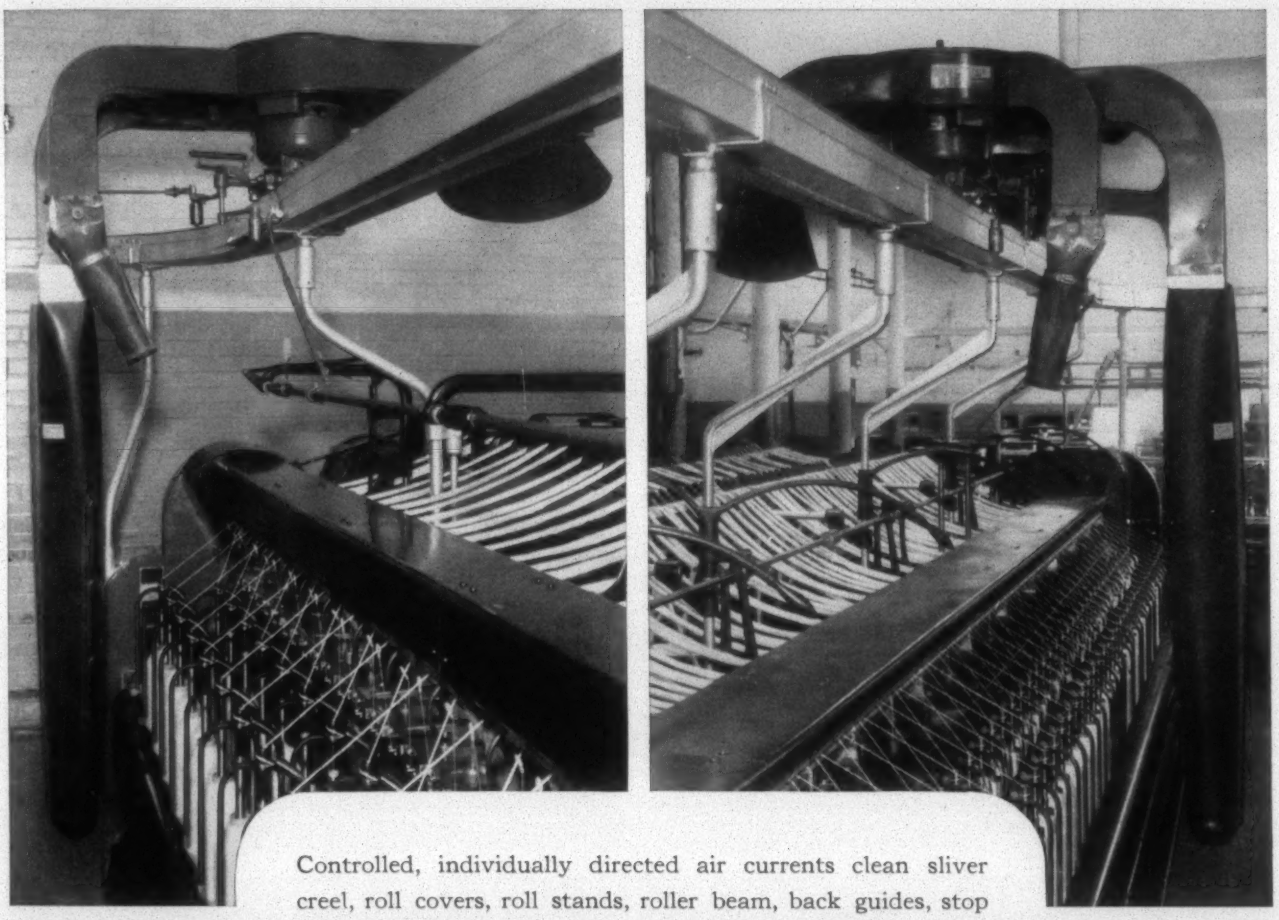

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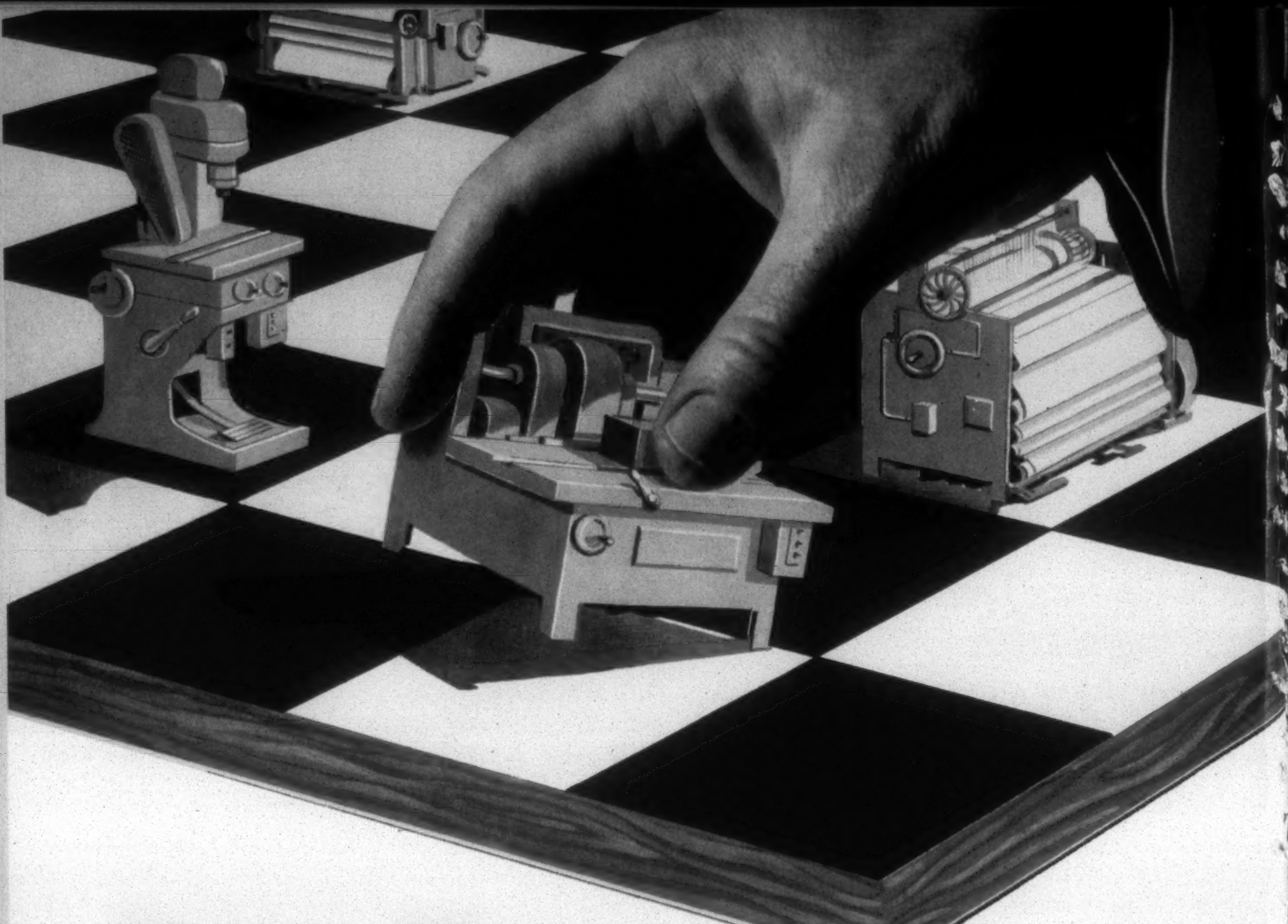

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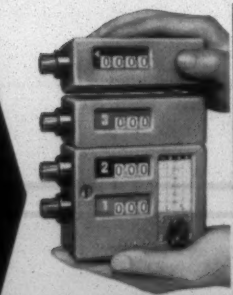

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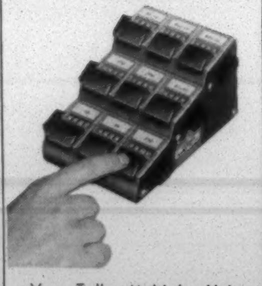

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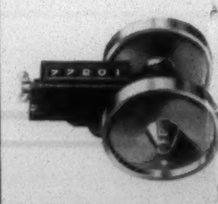

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